The Baillie Lectures

ON

FRAGMENTS OF PATHOLOGY AND THERAPEUTICS.

Delivered at St. George's Hospital on May 11th, 18th, and 25th, 1899,

BY W. HOWSHIP DICKINSON, M.D. CANTAB., F.R.C.P. LOND.,

CONSULTING PHYSICIAN TO ST. GEORGE'S HOSPITAL AND TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET; HONORARY FELLOW OF GONVILLE AND CAIUS COLLEGE; CORRESPONDING MEMBER OF THE ACADEMY OF MEDICINE OF NEW YORK.

LECTURE I.

Delivered on May 11th, 1899.

GENTLEMEN,—In casting about for subjects of the few lectures which as Baillie Lecturer it is my duty as well as my pride to deliver I looked back for matters which had formerly interested me but which for the most part I had never found time to shape into any organised form though I may have touched upon some of them briefly and incidentally in this theatre and in the wards. I shall not confine myself to one topic but shall take up several almost as they come to hand; no common purpose may appear save that they all have to do in some way with disease, and may be as little connected as are hospital patients in adjoining beds who suffer from different disorders. If my subjects are various I may console myself with the reflection that I appeal to a variety of tastes and shall deem myself unfortunate if I am equally unpleasing to all.

I propose to begin with a question of pathology. In my last Baillie Lectures I dwelt upon some aspects of hypertrophy of the heart. I shall commence these with some considerations regarding dilatation. For those who are not finally repelled by this somewhat dull subject I shall endeavour to provide something of which the practical bearing is more obvious; I shall touch upon diet in certain disorders, upon the limitations which attend the use of meat extracts as food, upon the therapeutical effects of water, and finally, if time serves, upon the employment of superficial applications in deep disorders, directed, as they often are, by considerations as superficial as themselves.

DILATATION OF THE HEART, ESPECIALLY IN REFERENCE TO VALVE LESIONS.

Dilatation of the heart has occupied less attention than hypertrophy. I dwelt upon the cardio-vascular question in my last Baillie Lectures and it is not my intention now to deal with this or any form of hypertrophy excepting by such incidental reference as is not to be avoided. Dilatation has long struck me as very imperfectly understood, having regard to the several cavities which display the change and the several valve lesions which give rise to it. Any contribution to real knowledge with regard to dilatation of the heart, a disorder often inferred on insufficient grounds and treated, if this be possible, when it does not exist, may be welcomed as tending to release the organ from the grasp of quackery and imposture. In a series of cases collected from our post-mortem books during seven years I find that dilatation of the ventricles is more frequently recorded than that of the auricles, dilatation of the right side more frequently than dilatation of the left. To descend to particulars I find dilatation of both ventricles recorded in 95 instances, of the left without the right in 49, and of the right without the left in 117. As to the auricles, both were mentioned as dilated in 34 instances, the left without the right in 14, and the right without the left in 31. I will take the cavities separately with regard to the causes of their dilatation. It may be observed at starting that dilatation of the right ventricle, however frequent in comparison to that of the left, was in most cases slight—due to disease of the respiratory organs rather than of the valves.

First as to the *left ventricle*. Obstruction to its exit usually causes hypertrophy rather than dilatation, though in some circumstances dilatation is also apparent. Aortic stenosis causes great hypertrophy, little or no dilatation. Obstruction in the course of the aorta such as is caused by thoracic aneurysm causes some degree of dilatation but not much. Renal hypertrophy is well known and has been fully discussed. Some of the largest degrees of hypertrophy of the left ventricle are of this nature, the right ventricle sharing in a very minor extent. The change is produced by an abnormal resistance which is opposed to the contraction of the ventricle by an obstacle in the course of the blood which leaves it, which obstacle is presumably located in the capillaries. With the hypertrophy is more or less dilatation, the dilatation being more pronounced in the more rapid forms of the disease, the hypertrophy in the more protracted. It is obvious that stretching may be a rapid process while hypertrophy must be a slow one. The dilatation of the left ventricle which ensues upon obstruction of its exit, or in other words upon the abnormal retention of blood within the cavity, is greatly exceeded by that which ensues upon the abnormal introduction of blood into it as occurs with aortic regurgitation. Here we have blood entering the ventricle abnormally through the aortic valve at the same time that blood is entering the same cavity normally through the mitral valve. It is to be observed that the abnormal introduction of blood in diastole is a far more potent cause of dilatation than the abnormal retention of it in systole. This is an important consideration in the understanding of dilatation. Dilatation, like hypertrophy, is the result of pressure within the cavity which is dilated. The pressure is more effective in producing dilatation when it is applied during expansion than during contraction. It is obvious that during the tension of muscular contraction—in other words, during systole, there is more resistance to stretching than during the relaxation of diastole. Hence the extravagant expansion of the ventricle which occurs with aortic regurgitation notwithstanding that the walls are reinforced by hypertrophy. Why should this hypertrophy occur with simple aortic regurgitation in which there is no obstruction ahead? The cause is clear. The blood which falls back into the ventricle has to be again driven out. The work of the heart is increased by a sort of labour of Sisyphus. It has at each contraction an abnormal quantity of blood to expel with necessarily increased pressure on its walls in systole.

Next comes another cause of dilatation of the same cavity in which the same principle is to be recognised as that which causes dilatation under aortic regurgitation. It is a matter of common observation that in connexion with regurgitation through the *mitral* valve the left ventricle is considerably dilated and somewhat hypertrophied. How comes this? Should we not expect the contrary? If hypertrophy and dilatation are caused by intra-ventricular pressure how is it that these ensue when intra-ventricular pressure is abnormally reduced? For so it must be, at least during systole, by a leak which discharges as the ventricle contracts. The key to the mystery is obviously this: though the intra-ventricular pressure is reduced during systole it is increased during diastole. All the blood which is sent the wrong way through the mitral valve during systole has to come back again during diastole so that the discharge from auricle to ventricle is increased by exactly the amount which has wrongfully passed from ventricle to auricle. The increased quantity of blood which enters the ventricle in diastole must necessarily produce increased pressure at this period though the reverse condition holds during systole.

So much for the dilatation of the left ventricle which depends on defects in the valvular machinery. Kidney disease as a cause of dilatation, with or without hypertrophy, is about as frequent as valve disease; upon this I need not dwell at present. These two conditions account for the great majority of cases. But there remains a minority, chiefly due to deterioration of the muscular substance. Diminution of resistance may, as far as dilatation is concerned, produce much the same result as increase of pressure. Among the causes of parietal weakening must be mentioned fatty and fibroid degeneration which are fully recognised in this relation, and there must also be mentioned many conditions of protracted or exhausting illness by which the ventricle, in common with other muscles, is impaired and weakened. Typhoid fever, diphtheria and diphtheritic paralysis, perforating ulcer with hæmorrhage, and cancer of the stomach are all represented in the series of cases from which I have chiefly drawn up this account. In several cases alcoholism takes a place as an antecedent

of dilatation; if the association be more than accidental it must be attributed to deterioration of the muscular fibre produced by the drink.

Dilatation of the *left auricle* may be conveniently considered in juxtaposition to that of the ventricle. The cause of dilatation of the left auricle is generally disease of the mitral valve which may be either obstructive or regurgitant. The dilatation is most remarkable with stenosis, the extreme narrowing of the auricular exit which sometimes exists opposing resistance to the emptying of the cavity and occasioning repletion, dilatation, and hypertrophy. The abnormal pressure within the cavity, be it observed, is during its contraction, and hypertrophy of the muscular tissue together with dilatation is a conspicuous result. Mitral regurgitation acts differently; the pressure is here brought to bear within the auricle during its expansion with the result of great dilatation and comparatively little hypertrophy.

To pass now to the right side, the *right ventricle* is dilated with greater frequency than the left but usually to a less degree. Disease of the valves, the chief source of the greater degrees of dilatation, prevails less on the right side than on the left. Dilatation of the right ventricle is due in an overwhelming majority of instances to obstruction of the pulmonary circulation by diseases proper to the respiratory organs. I find that in 86 cases in which the only noticeable dilatation was of the right ventricle this was attributed in 62 to obstruction in the lungs or air-passages. This number included instances of phthisis, emphysema, bronchiectasis, pneumonia, broncho-pneumonia, bronchitis, empyema, pleurisy, diphtheria, and other forms of laryngeal and tracheal obstruction. In one instance it was attributed to tetanus. In all these cases the dilatation was slight. The greater degrees of it were caused by disease of the valves mostly of the left side of the heart and of the mitral valve more often than of the aortic. Mitral regurgitation and mitral obstruction are both frequent in this relation, regurgitation with a slight preponderance. To look for a moment at the action of mitral regurgitation in dilating the right ventricle it is obvious that the regurgitant current overloads the left auricle and the pulmonary veins during the ventricular systole simultaneously with the normal discharge from the right ventricle into the pulmonary artery. The two currents conflict, the emptying of the right ventricle is hindered, and dilatation ensues by abnormal pressure within this cavity during systole. With regard to mitral stenosis the same result is in the end produced. The left auricle, unable to empty itself, remains permanently occupied and thus opposes a difficulty to the relief of the pulmonary veins and of the right ventricle. Aortic regurgitation is also a recognisable cause of dilatation of the right ventricle. The way in which it acts is clear. The repletion of the left ventricle in diastole hinders the discharge by the pulmonary veins, impedes the current in the pulmonary artery, and so places difficulty in the way of the closure of the right ventricle. Disease of the right valves is insignificant as a cause of change in the right ventricle in comparison with disease of the left valves. Tricuspid regurgitation is recognisable, though infrequently, as a cause of dilatation of this cavity. It acts, as does mitral regurgitation upon the left ventricle, by creating repletion during diastole. Dilatation of the right auricle frequently accompanies that of the right ventricle and may be due to any condition which impedes the emptying of that cavity. These conditions I need not recapitulate. The varieties of pulmonary obstruction, particularly if chronic, and disease of the left valves, especially of the mitral, are the most frequent causes. Mitral stenosis gives rise to great dilatation of both auricles; the left is often hypertrophied as well; with the right dilatation is more prominent. The *modus operandi* of the latter change is obviously the loading of the pulmonary circulation and the consequent difficulty in the discharge of the right cavities.

So much for dilatation of each cavity taken separately. There are many states in which both ventricles or all the four chambers are together affected. Multiple or general dilatation often depends on complicated valve disease, sometimes on disease limited to one valve, more especially if that valve present a double imperfection, and sometimes on an apparently simple lesion, such as that which occasions mitral regurgitation. When the valve lesions are multiplex it is easy to understand from what has been already put forth that the dilatation may be multiplex also. In the case of simple mitral regurgitation it is equally easy to see how this may affect several of, or all of, the cavities. The mitral reflux necessarily dilates the left auricle. The reflux in returning dilates the left ventricle. The repletion of the left auricle opposes the discharge from the right ventricle with consequent dilatation of the right side.

Mitral stenosis in theory should be attended with the opposite state of the left ventricle to that which attends mitral regurgitation. With the lessened admission of blood the cavity should shrink upon its diminished contents and become atrophied with the diminished blood-pressure within it. In rare instances this is so, but these are exceptions rather than the rule. Mitral stenosis is almost invariably attended with regurgitation and the consequent changes are thus complicated. Beside lesions of valves general dilatation, or dilatation affecting both sides of the heart, may be produced by aneurysm of the arch of the aorta, more rarely by pericardial adhesions and commonly by many conditions of pulmonary obstruction. With regard to aneurysm it is recognised that the disease *per se* has little effect in causing cardiac hypertrophy, though often associated with other causes to which it is due, but the cases to which I have appealed show that dilatation sometimes presents itself with aneurysm apparently as its consequence, and that the dilatation may affect both ventricles. It is to be suggested that the dilatation of the left ventricle is first produced by the aortic obstruction and that mitral incompetence follows though the valve segments are healthy, and subsequently the changes in the right side which mitral regurgitation produces. It is not easy to isolate the action of pericarditis as a cause of cardiac dilatation or hypertrophy since pericardial inflammation is so constantly associated with valvular inflammation that we may doubt how much to attribute to each. With pericardial adhesions it is obvious that resistance is opposed to the movement of the walls and increased work imposed which may lead to hypertrophy.

From the cases which I have collected it seems clear that dilatation of both sides of the heart, often together with hypertrophy, is concurrent with many conditions of respiratory embarrassment, among which may be mentioned bronchitis and broncho-pneumonia, emphysema, diphtheria, and diphtheritic paralysis. It is obvious that such conditions obstruct the pulmonary circulation, hinder the discharge from the right ventricle, and thus cause its dilatation; but how do they affect the left ventricle? The facts suggest that engorgement of the right side of the heart acts backwards by retarding the venous circulation, produces stagnation in the systemic capillaries, then of the systemic arteries, and eventually tells upon the left ventricle. I could adduce a case in which enormous dilatation and hypertrophy of both ventricles, the heart weighing 32 ounces, presented no other obvious cause than fibrosis of the lung together with bronchiectasis. I cannot but think it probable that in this case the fibrosis was more general than is represented and the cardiac hypertrophy not simply due to the state of the lung.

Hitherto I have been considering causes of dilatation of which the mechanical origin is obvious in valvular imperfection, or such as depend on obstructions in the pulmonary circulation which, though less obvious, are scarcely less evident. I now proceed to others which depend on inferential obstructions, on changes in the tissue of the heart itself, or on constitutional conditions. The most frequent of all these is renal disease. I need not revert to the frequency of hypertrophy and dilatation of the left ventricle from this cause, but may add that in most cases the right ventricle is also involved, though to a much less extent. As between hypertrophy and dilatation though hypertrophy generally with some attendant dilatation is far more common with renal disease than dilatation alone, yet dilatation is sometimes conspicuous particularly with the less protracted forms such as result in the large white kidney of nephritis and the contracted white kidney of the same origin.

Dilatation of one or both ventricles with or without the participation of the auricles is sometimes due to fatty or fibroid changes in the walls, but these causes are numerically insignificant as compared with other cardiac and constitutional states. Of 259 cases of ventricular dilatation I found only nine where obvious muscular change without valve-lesions was recognised as giving rise to it, though it is of course likely that muscular changes may have been present in some cases where they escaped notice.

Lastly, many constitutional causes, or causes acting on the system at large, are productive of cardiac dilatation, which condition may be spoken of without reference to particular cavities, though it chiefly concerns the ventricles. Among these constitutional causes are such as affect the general nutrition, among which may be mentioned simple ulcer of the stomach particularly when associated with loss of blood, carcinoma of the same organ, anæmia (pernicious or of other kinds), diabetes, and possibly alcoholism. In the series of cases I have spoken of drink occasionally presents itself as the antecedent of the dilatation, but it is to be doubted whether this is more than an accidental occurrence. Putting this question aside it is sufficiently evident that anæmia and exhaustion are efficient causes of cardiac dilatation though only of the minor degrees of it. It is to be presumed that the heart shares in the general debility and the muscle stretches from want of tone.

To touch in retrospect upon the salient points connected with cardiac dilatation and hypertrophy, they are these. An obstacle presented to the contraction of any of the chambers of the heart is followed by hypertrophy and dilatation in different proportions. The thicker walls are more liable to hypertrophy, the thinner to dilatation. The ventricles are more liable to hypertrophy than the auricles, the left ventricle more than the right. Dilatation follows the reverse rule and is more prone to affect the auricles than the ventricles, the right ventricle more than the left. Hypertrophy of the left ventricle, often with little or no dilatation, ensues whether the impediment is conspicuously placed at the aortic exit or is remotely placed in the capillaries and is a matter of inference rather than of observation. When hindrance is opposed to the contraction of the *right* ventricle, which is usually by obstruction in the lungs, dilatation preponderates, though hypertrophy is more or less apparent. Much dilatation, often combined with considerable hypertrophy, often affects the left auricle as the result of obstruction at the mitral orifice as the result of stenosis. All these causes of hypertrophy and dilatation act by increasing the intra-cardiac pressure during the process of contraction. But there is another process which I particularly wish to insist upon which is especially productive of dilatation—that is, increase of intra-cardiac pressure during relaxation or diastole. Pressure exerted at this time, while the walls are in the act of expansion and the muscle presents a minimum of resistance, would seem to be well suited to cause stretching and it is a matter of observation that what might be expected actually occurs. A striking example of this is afforded by the dilatation of the left ventricle under aortic regurgitation, the dilating force being brought to bear while the chamber is expanding. With the dilatation occurs also hypertrophy. All the blood which has fallen back into the ventricle has to be re-expelled so that the systolic labour of the ventricle is increased in proportion to the amount of regurgitation. Another instance of dilatation produced by intrusion in diastole has been sufficiently dwelt upon in connexion with mitral regurgitation, the blood driven back into the auricle during the ventricular systole being returned into the ventricle during its diastole to its distension and dilatation.

In conclusion, both dilatation and hypertrophy are brought about by intra-cardiac pressure which is either absolutely increased or is greater than the means of resistance. Commonly these two results are associated, though the proportions vary. Hypertrophy is apt to prevail when there is undue retention of blood during systole, dilatation when there is undue intrusion of blood during diastole. Hypertrophy is the more apparent when the exit of blood is impeded, dilatation when the entrance of blood is increased. The one affects the heart in systole, the other in diastole. The origin of dilatation in distension during diastole, though not the only mode of its production, perhaps may be regarded as the chief and as one to which attention needs to be emphatically called.

ISOLATION HOSPITAL FOR GLAMORGANSHIRE.—At a meeting of the Llandaff and Dinas Powis Rural District Council held on May 30th the clerk reported that the Glamorganshire County Council had written stating that unless the district council showed something definite with regard to the proposed isolation hospital a compulsory order would be issued. After some discussion the matter was referred to the committee.

ABSTRACT OF AN

Oration on Medicine:

A CENTURY OF MEDICINE IN AMERICA.[1]

Delivered at the Fiftieth Meeting of the American Medical Association, Columbus, Ohio, on June 7th, 1899,

BY J. C. WILSON, M.D.,
OF PHILADELPHIA.

THE most wonderful century of the world's history draws to a close. ..... Has medicine, that branch of human endeavour in which we are especially interested, kept progress with the times? Has the century done for it what it has done for other things? The question is not hard to answer. For medicine the changes of this year-hundred have been awakening from the sleep of ages. The work of the early anatomists, the great discovery of Harvey, Auenbrugger's laborious revelation, Jenner's patient investigation, were stirrings in the slumber. The dawn of the century was auspicious. Vaccination was widely practised and its value was everywhere recognised. Corvisart rescued the Inventum Novum from oblivion. Laennec invented the stethoscope and discovered auscultation. The methods were practically complete, but it took 40 years and the influence of Skoda to make physical diagnosis a familiar art. The era of speculative medicine was fast drawing to a close. Fads and "isms" arose, as they will arise from time to time among the half-educated and the degenerate, but their influence has been with few exceptions shortlived and their reaction upon scientific medicine favourable. The microscope ceased to be a scientific toy and became an instrument of precision. New sciences ranged themselves as the handmaids of medicine. In 1858 Virchow issued the "Cellular Pathology as Based upon Physiological and Pathological Histology." It was but a step onward to experimental physiology, physiologic chemistry, and experimental therapeutics. In truth the "close and severe" methods had come and had come to stay. It was evident that these methods and these only could be successfully used in the search for truth. The fairy-tales of science had become the everyday handbook of the medical man. We had fully entered upon the era of experimental medicine. Ether and chloroform anæsthesia for operative purposes robbed surgery of half its terrors and rendered possible operations previously impracticable. The germ theory of disease came into prominence as a working hypothesis. Lister made the astounding discovery of surgical cleanliness, and early in the last quarter of the century the new surgery replaced the old. Marvellous changes! Anæsthesia had robbed surgery of half its terrors; an almost perfect antiseptic technic has taken away the rest. In fact, there are those, chiefly among the gentler sex, for whom surgery appears to have no terrors whatever.

[Dr. Wilson then pointed out that clinical medicine did not progress so fast as other divisions of the subject until bacteriology came into being. Therapeutical science had been greatly improved, but the great gain lay in the field of preventive medicine. Dr. Wilson continued:]

The aim of modern medicine and the object of modern therapeutics is not so much to cure disease as to prevent it. The human mind is now chiefly concerned in the study of origins. In every department of research, whether the natural sciences, criticism, history, even theology, the same method of inquiry is pursued. In the words of Allbutt, the analytical method "is leading to a revolution in our conception of therapeutics as of all these other studies, a revolution which as yet we have not fully understood. This revolutionary conception is that death is not to be driven away by the apothecary, not by any cunning compilation of drugs, but is to be prevented by the subtle strategy which consists in knowing all the moves of the game." And he predicts that "the medicine of the future will consist in setting our wits to nature; in recognising that when evils

[1] We wish to acknowledge the courtesy of the editor of the *Philadelphia Medical Journal* who has given us the opportunity of publishing this address.

have befallen us there is no counsel, and that in the simple beginnings of things are the time and place to detect where stealthy nature, atom by atom, builds and unbuilds, feeds us or poisons us." Modern medicine is no longer content with trying to make some salvage out of the wreckage of disease, but is earnestly seeking for measures by which the storm can be avoided, the channels deepened, and the rocks upon which high hopes are wrecked beaconed.

All that is best in the older medicine is to be found in the new, but the new is something essentially different. The old was an art based upon empiricism, relying largely upon so-called specifics and not altogether scornful of charms and magic. The new is an art based upon a group of correlated sciences and deriving its power from the forces of nature. But the new is the outcome of the old, for the empiric method is the gateway to science and the accumulation of facts necessarily precedes generalisations in regard to them.

It is of interest to note the position of the United States in regard to modern medicine. It is no long time since our people were pushing westward over the wilderness and a famous poet and story-writer has accused us of being some centuries behind Europe in learning and manners. Railroads and the telegraph are great civilisers, and the Postal Union a wonderful teacher. There is no wilderness now except that beyond the seas and "a few centuries" is a figure of speech. In medicine the world's knowledge is ours. The latest work of investigators in every field of research and in every country is quickly before us and we give something in return. Laveran discovered for us the malarial parasite and Marchiafava, Golgi, and others of the Italian school elaborated his observations; but an American, the late Professor J. K. Mitchell, had anticipated the discovery, being "the first to approach in a scientific spirit the nature of infective disease and particularly in malarial fever," and Laveran's observations were early confirmed on this side the Atlantic by Councilman, Osler, Thayer, and others. Roux and Behring gave to the world the treatment of diphtheria by antitoxin serum but the uncertainties concerning its efficacy were settled by Welch's analysis of the statistics and the two collective investigations of the American Pediatric Society. Ernest Brand devised the method of treating enteric fever by systematic cold bathing and showed that by it the mortality is cut in half, but it remained for American practitioners to demonstrate that the plan is not only feasible in hospitals, but also in private practice. Macewen and Horsley showed that cerebral tumours could not only be definitely localised, but also that they could be successfully removed, but cranial surgery was carried to its full development and a perfect technic laid down by Keen. Here and there we have given more than we have received. We recall the contributions to neurology and especially the successful treatment of neurasthenia and hysteria by Mitchell, the second in the line of an illustrious medical family, and speak of intubation in grateful memory of the gentle O'Dwyer, and in surgery we are reminded that the New World has given something to the Old by the work of Senn, Murphy, Richardson, McBurney, my colleague Deaver, and by that in earlier times of the clear-minded Grosses, father and son, the Brothers Atlee, and the heroic McDowell. The instances of accord, response, co-endeavour between the workers in medicine on the opposite shores of the Atlantic could be indefinitely multiplied.

In the field of literature the conditions are the same. On the one hand the great weeklies of Berlin and Munich, THE LANCET, and the *British Medical Journal;* on the other hand the journals of Boston and New York, the *Philadelphia Medical Journal* and the *Journal of the American Medical Association*. It is impossible to speak here of individual monographs and treatises. But against such store-houses of medical lore as Ziemssen's Encyclopedia and Nothnagel in Germany, and Allbutt's System in England, may we not set Pepper's System and that of Loomis and the Twentieth Century Practice? It is an exchange of courtesies, of products. It is a well-balanced reciprocity.

If America is a little behind in original research she is very alert in the application of that which is serviceable. If her investigators are less laborious and less numerous her practitioners excel in adaptability, tact, and skill. Meetings of national societies such as this and the national and international congresses are a strong force in the process of unification. One of the finest things in the medicine of our day is its solidarity. In the institutions where medicine is taught and in the organisation of the instruction we are making hopeful advancement. Much remains to be done, but the defects are chiefly in the direction of want of uniformity of requirement and of full coöperation among the several States and are in a fair way of correction. An open-handed philanthropy has scattered among the great centres of population from the Atlantic seaboard to the Pacific slope commodious, well-appointed, fully-equipped hospitals, not at all inferior to the great hospitals of the Old World. Their foundations are less ancient, as must be in a young country, but their spirit is more plastic. Traditions are fine but they sometimes fetter thought. To the noble-hearted non-medical managers of these institutions it is clearer than ever before that while the care of the sick poor is the primary object it is by no means the whole object of a modern hospital. The instruction of the student, the training of the medical man, clinical and pathologic research, the accumulation of facts for immediate or future use in scientific medicine are secondary functions of essential importance. So it has come to pass that to the non-medical mind, as it has long been to the medical, the necessity of the set of laboratories, pathologic, bacteriologic, clinical, is paramount. The correlative fact that the number of the staff must be much greater in proportion to the number of the patients than formerly has also become apparent. So that by a process of evolution hospitals are taking a much larger part in the education of the medical man than ever before, even those in which a very conservative management is hostile to clinical instruction.

It is clear then not only that medicine has kept pace with the progress of the times, nay, more, that it has made advances even more wonderful than many other departments of thought, but also that in America the position of the profession compares favourably with that of any other country. Medicine with us is to-day one with the medicine of the world. Yet it is little more than 100 years since the country was without a medical profession in the sense in which the term is now used and was then used in the Old World. This is not the time nor the place to rehearse the history of medicine in the colonies. The subject is set forth in great detail in the writings of Beck, Clark, Bigelow, Ruschenberger, N. S. Davis, and Billings.

[Dr. Wilson here mentioned how the first enactment regulating the practice of medicine in the American colonies was passed in New York in 1760. The medical faculty of Philadelphia was established after the revolutionary war in 1788, although the Medical School had commenced in 1765. Dr. Wilson continued:]

It must be admitted that the rapid strides with which the medicine of the younger country has overtaken and is now keeping pace with the medicine of the world were largely due to the facilities of intercommunication that constitute one of the peculiarities of modern life. Knowledge travels far and fast. It has the wings of the light. It must be also conceded that such progress has been aided and accentuated in a remarkable manner by the master-spirits who, from time to time appearing upon the scene, seem to be charged with an especial mission and whose presence marks eras in the course of human events. Easily and by far the greatest of these, *primus inter pares*, is Rush. Others among his contemporaries I have already referred to. Nor do I intend to enumerate a complete list. Permit me to name one here and there, sometimes a group, as fine examples of medical men who, to say the least, are not commonplace. It is easy for one who has read our medical history to recall John Morgan, Redman, Hosack, Drake (who wrote the "Diseases of the Mississippi Valley"), or that coterie of Louis' pupils, including Shattuck, Oliver Wendell Holmes, and Gerhard, who brought back from France physical diagnosis, the distinctions among the fevers, and reasonable methods of clinical work; Jackson and Morton, and the controversies concerning ether; the group of men who, representing others, it is true, really effected the organisation of the American Medical Association, whose officers were Knight, Bell, Delafield, Arnold, and Stillé. Jones of New Orleans is to be mentioned among those whose writings have powerfully influenced the trend of medical thought in the United States; and Flint and Otis and Woodward, to whose industry and ability we owe the "Medical and Surgical History of the War of the Rebellion"; and Billings and Fletcher who have given to the medical world the "Index Catalogue of the Library of the Surgeon-General's Office of the United States Army" and that unique and most useful of current medical publications, the "Index Medicus." I mention with that emotion with which we speak of a companion newly passed away John B. Hamilton, of whose skill as an

organiser this association has had abundant proof; and Pepper—a life of matchless energy and devotion to the widest human interests, whose rare gifts as a physician and abilities as a teacher, whose civic pride and high patriotism, will place him, when the dispassionate history of our times come to be written, among the great Americans and in the foremost rank of the citizens of that Commonwealth which reverently claims Franklin and Rush as her own.

It is not wholly to the ease with which knowledge is spread nor to the great men of the profession that we owe the advanced position of medicine in America to-day. Important as each of those factors is, it may well be questioned whether their combined influence could have impressed upon the art of medicine that peculiarity in which the profession of our country stands pre-eminent and which is at once of the greatest practical value and of the richest promise for the future. That peculiarity is the prevalence of high ideals. All kinds of men engage in the pursuit of medicine from all kinds of motives. But to the necessity of a livelihood and to personal ambition the American medical man adds, and very often in the absence of those he cherishes, a sort of chivalric devotion to some principle allied to his calling but only indirectly bearing upon his everyday affairs. It may be a collateral science, or preventive medicine, or schemes for the welfare of the poor, or *belles lettres*, or medical libraries, or for himself a broader knowledge and a keener art, or toward his fellow-man a greater gift of usefulness. Such thoughts are solace in his toil and recreation in his hours of leisure; with widening opportunities and high examples he must have something more than his everyday work. Without some cherished ideal he cannot be content. This wholesome mental restlessness is peculiarly American. It comes of our physical restlessness. We lack repose because we abound in energy. Contentment means conservatism and conservatism points in the direction of stagnation. When we speak of stagnation we think of loneliness, of isolation. The tendency which distinguishes American medicine is essentially opposed to isolation, to individualism. It exerts itself in the direction of a higher, more complete, and more specialised organisation of the profession. It is this tendency which has made the general fount of knowledge accessible to all members of the profession who care to share in it—which has given to the independent worker, in whatever department, an uplifting sense of companionship, of community of interest, of sympathy in a common cause. It is this which has brought into the life of the toiling practitioner in the monotony of his everyday duties and cares a saving consciousness of personal dignity and power.

To the physicians of Northern New Jersey must be ascribed the credit of having made the earliest attempt to promote the interests of the profession by means of organisation. In the year 1766 a meeting was held at New Brunswick attended by delegates from all parts of the State and a permanent organisation effected. The objects of the association as set forth in the preamble to the constitution were "mutual improvement, the advancement of the profession, the promotion of the public good, and the cultivation of harmony and friendship among the members." This society held regular meetings twice a year until the breaking out of the war. In 1781 the Massachusetts Medical Society was incorporated. Towards the close of 1786 the College of Physicians of Philadelphia was instituted. Other similar organisations followed from time to time until that memorable meeting of May 7th, 1847, at which, by the election of Nathaniel Chapman as President; Jonathan Knight, Alexander H. Stevens, James Moultrie, and A. H. Buchanan, Vice-Presidents; Alfred Stillé and J. H. W. Dunbar, secretaries; and Isaac Hays, treasurer, was finally carried into effect the organisation of the American Medical Association.

[After a few remarks upon the importance of such an organisation Dr. Wilson proceeded:]

In general as regards the requirements for a degree the American Medical Association should, in my opinion, exert an influence to secure uniformity in the requirements for admission, a systematic graded course, with uniform tests at the end of each year, and uniform requirements for graduation. With reference to written examinations the question of the honour system should be persistently agitated. If that system can be carried out at many of the colleges, at West Point and Annapolis, and at the University of Virginia, why not in all our medical schools? Its general adoption would go far in determining a high standard of personal and professional honour. It should exert its influence also to secure general uniformity in the examinations for the licence to practise among the States and a general reciprocity among those boards by which the licences may be transferred. It should strongly exert its influence in the direction of the regulation of the specialties and the requirement of evidence of clinical experience in general medicine as pre-requisite to the practice of them It should exert its influence in the matter of expert testimony in courts of justice. This subject is a growing scandal. A change of practice is urgently necessary both in the interest of justice and that of the medical profession. It should exert its influence to secure such legal enactments in the several States as will protect the people from the various forms of unorganised and organised quackery and to the end that no licence to practise medicine in any of the branches shall be granted to any applicant until such applicant has successfully passed an examination in anatomy, physiology, pathology, surgery, midwifery, and the diagnosis of diseases; and that a stringent penalty shall be enforced against all persons who seek to practise upon the sick, injured, or deformed, by any means or upon any pretext whatever, except in the case of accident or emergency, and then only for the purpose of immediate relief and assistance. It should exert its influence to build up in the secular and religious press of the country a proper sense of responsibility in regard to lewd, indecent, and criminal advertisements thinly disguised as medical and against the appearance in such publications and in certain so-called medical journals of advertisements of nostrums and cure-alls. It should exert its influence to secure such legislation as will obtain uniform divorce laws for the whole country and do away with the legal enormity of a man and woman being legally married in any State and living in adultery so soon as they have crossed its borders. The question is primarily one of morals, but it is also one of health. It should exert its influence strongly in favour of proper rearrangement of the status of military and naval medical officers to the end that the efficiency of those branches of the public service may be increased and the recompense and the rank of the medical officers properly adjusted. It should exert its influence to secure the dual appointment of surgeons and physicians to regiments and posts, since the work of the two is complementary and cannot in the present state of the art of medicine be properly performed in all its details by any one man, especially in active service; also to secure the establishment of clinical laboratories in connexion with the military hospitals in the tropical stations with the detail of medical officers especially fitted by training and experience for the investigation of tropical diseases and conditions. It should exert its influence to secure a national quarantine service with full jurisdiction over the seaboards and the lake borders and over internal regions affected with general epidemics or endemic conditions not amenable to the control of the local authorities. It should exert its influence to secure the appointment of a secretaryship of Public Medicine, the portfolio of which should be assigned to a medical man, to the end that the President may be promptly and authoritatively advised concerning technical questions of vital importance to the welfare of the nation.

To many of you these suggestions seem utopian and impracticable. Not so. If we earnestly desire them they will come to pass. Their fulfilment rests with you and in your hands is the power of an organised profession.

CHELSEA CLINICAL SOCIETY. — The second annual dinner of this young society was held at the Criterion Restaurant on June 3rd, the President, Mr. J. Foster Palmer, being in the chair. A numerous company of members and their friends attended and a most enjoyable evening was spent. After the several loyal toasts the President proposed the toast of "The Chelsea Clinical Society." He gave a short *résumé* of the work done by the society during the past year, referring more especially to the debate on Tuberculosis, a report of which appeared in our columns. Dr. C. C. Gibbes replied. The toast of "Kindred Societies" was also proposed by the President (in the absence of Dr. C. J. Harrison) and Dr. Isambard Owen replied, calling attention to the advantages derived from medical societies in promoting unanimity amongst professional men. The usual toasts of "The Visitors," "The President" (proposed by Dr. W. Ewart), and "The Officers of the Society" followed and the social qualities of the meeting were enhanced by music and recitations.

THE EFFECT OF BATHS, MASSAGE, AND EXERCISE ON THE BLOOD-PRESSURE.

BY WILFRID EDGECOMBE, M.D. LOND., F.R.C.S. ENG.,
AND
WILLIAM BAIN, M.D. DURH., M.R.C.P. LOND.

Mode of observation.—The recent appearance of new instruments for the determination of blood-pressure in the human subject has enabled us to make the following series of observations on the effects of baths, massage, and exercise on the arterial and venous blood-pressure. The hæmadynamometer of Oliver and the pulse-pressure manometer of Hill were carefully compared and found to read alike, but as the former instrument proved to be rather easier of manipulation and possesses a much wider scale it was used throughout. Both maximum and mean arterial pressures were recorded and the venous pressure was taken according to the method described by Oliver.[1] For arterial pressure the radial artery was employed, the subjects being in the recumbent posture except where otherwise stated, with the arm extended on a level with the heart. For venous pressure the veins on the dorsum of the hand or wrist were taken in some subjects; in others those of the forearm, with the same precautions to eliminate the effect of gravity. 10 subjects in all were experimented upon, their ages ranging from 20 years to 60 years. They included marked examples of both low and high pressure. Most of the results were confirmed by repeated observation. In the few instances in which this was not done confirmation did not appear to be necessary

General considerations.—At the outset, before proceeding to discuss the results, it is perhaps expedient to refer briefly to the factors which govern the production and maintenance of blood-pressure and to point out how far they can be estimated by the instrument used. The chief factors concerned are the output of the heart, the extensibility and elasticity of the arterial walls, and the peripheral resistance. None of these can be directly measured by the instrument. The maximum arterial pressure, as measured by the instrument, being that force which just prevents the passage of blood along the artery, is a force equal to the sum of the true maximum arterial pressure and the forces requisite to produce distortion of the tissues and artery. The latter factors we are unable to measure, though they probably remain constant for each individual during any short series of observations. The mean arterial pressure is taken as the mean pressure recorded by the instrument when the indicator gives its maximum excursion. The difference between the maximum and mean arterial pressures as thus recorded can serve as an indication of the force with which the blood is discharged if we suppose the rate of discharge to remain the same during the time occupied by the observation. When the rate of working of the heart varies during the period of observation the indication is less reliable.

The two variable factors determining changes in the mean arterial pressure during any short series of observations are the output of the heart and the degree of constriction of the peripheral arterioles; consequently a fall in mean arterial pressure may be caused by a dilatation of the peripheral arterioles or by a diminished output of the heart, the latter being due to a slowing of the rate of working or to a diminished output of blood per beat. A rise in mean arterial pressure will be due to the same factors working in the opposite direction, and a variation in mean pressure can also be caused by variations in opposite directions but to unequal extents of the same two factors.

From the measurement of the venous pressure as recorded by the instrument we can to some extent infer the state of the peripheral resistance, for a constriction or dilatation of the arterioles will be accompanied by a fall or rise respectively of venous pressure, provided the other factors remain constant. Hence variations in venous pressure would serve as a measure of the degree of peripheral resistance were the other factors to remain the same.

[1] Journal of Physiology, vol. xxiii., 1898, Part 3; Proceedings of the Physiological Society.

BATHS.

Cold.—The effect of the cold bath of plain water is to raise the arterial pressures, both maximum and mean, and to lower the venous pressure (see Experiment I.). As in this

EXPERIMENT I.—*Cold Bath; two Minutes at 15° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	70	190	130	25
After	72	210	150	10
10 minutes after ...	70	185	125	25

instance the rise in arterial pressure is accompanied by a fall in venous pressure we should conclude that this is caused by a peripheral constriction. The other way the result could be produced—viz., by increased output of the heart—does not seem to be indicated by any variation in the pulse-rate. That the conclusion which we draw from this observation is correct is shown by other experiments specially designed to determine the influence of cold applied to the skin. The rise in pressure obtained is of brief duration in normal subjects, for when reaction sets in the arterial pressure falls slightly below its original level, presumably from arteriolar dilatation, and the venous pressure rises to its initial height; relatively, therefore, to the arterial pressure it is slightly higher than before the bath.

If to cold the effect of percussion be added in the form of a strong needle-douche applied simultaneously to the whole surface of the body the arterial pressure becomes raised to a greater extent than with cold alone. Experiment II. gives the details of the results obtained, the subject having a low initial blood-pressure.

EXPERIMENT II.—*Strong Needle Bath begun at 37° C. and rapidly cooled down to 16° C.; Time, two minutes.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	64	115	85	15
After	72	150	115	10

In this case there is a considerable rise in arterial pressure with a small fall in venous pressure and a distinct increase in the pulse-rate. These changes are best explained by supposing them to be due to a moderate amount of peripheral constriction accompanied by an increase in the output of the heart. That we are correct in supposing that the latter factor is at work in this instance is borne out by the results of Stewart's[2] experiments upon the output of the heart. He showed that a moderate increase in the pulse-rate usually corresponded to an increase in the output per second, a result which might explain the whole or part of the rise observed in this experiment. That peripheral constriction also plays a part in producing this rise is indicated by the result of the preceding experiment and by the fact that a simultaneous fall in venous pressure occurs.

Heat.—The effect of warm baths of plain water, on the other hand, is to reduce the arterial pressure to an extent roughly proportionate to the increase of temperature (see Experiments III., IV., and V.).

EXPERIMENT III.—*Hot Bath; 10 Minutes; Temperature 48° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	62	185	130	20
After	64	170	117	15

[2] Journal of Physiology, vol. xxii., 1897, Part 3, p. 172.

EXPERIMENT IV.—*Warm Bath; 15 Minutes; Temperature 38° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	60	190	135	17
After	60	180	130	15

EXPERIMENT V.—*Sitz Bath, Running; 10 Minutes at 37° C., Cooled at Finish to 30° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	66	160	125	17
After	64	135	85	12

In each of these three experiments there is a fall in arterial pressure and a fall in venous pressure, the variation in pulse-rate remaining practically constant. If we contrast the percentage fall of arterial pressure with the percentage fall of venous pressure we find that in the first two cases the fall in venous pressure is in greater proportion than the fall in arterial pressure. A diminished output of the heart would tend to lead to a rise in venous pressure; therefore, as we know that heat produces local vascular dilatation these results are best explained as due in the first place to peripheral dilatation of the arterioles, and secondly to increased capacity of the vascular system resulting from that dilatation. It should be stated with regard to Experiment V. that before the bath the subject felt somewhat chilly; hence his arterial pressure was considerably above his normal and the fall that occurred was greater than would otherwise have been the case.

Heat in the form of hot dry air, applied generally, has a similar effect in lowering the maximum and mean arterial pressures, but it relatively raises the venous pressure. Not infrequently an absolute rise of venous pressure takes place, though in our experiments the relative rise was more commonly observed (Experiment VI.).

EXPERIMENT VI.—*Turkish Bath; General Dry Heat.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	70	200	135	25
After seven min. in hottest room at 99° C. ...	120	155	100	20
In cooling room after shampooing	74	170	115	20
Before	64	170	125	20
After 20 min. in second room at 77° C.	110	140	85	17
In cooling room after shampooing	70	155	110	20

Here the fall in arterial pressure after exposure to high temperature is considerable, while the fall in venous pressure is insignificant. These changes are accompanied by a marked increase in the pulse-rate which is nearly doubled. In the light of Stewart's[3] researches on the output of the heart the diminished output that accompanies a great increase in the frequency of the pulse may share in the production of the lowered arterial pressure, for he finds that "in general when the pulse-rate increases considerably the output per heart beat diminishes while the output per second may or may not alter, but is usually diminished too, although not in the same proportion as the output per beat." Arteriolar relaxation also takes place and both factors act in the same direction and combine to lower the arterial pressure. During the cooling process the arterial pressure rises somewhat, but the net result is a fall, while the venous pressure in the one case remains the same and in the other is slightly raised. The rate of heart beat has nearly returned to its original frequency.

[3] Loc. cit.

Experiment VII. shows the effect of general moist heat with subsequent needle bath.

EXPERIMENT VII.—*Russian Bath; General Moist Heat; 15 Minutes at 41° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	64	155	107	20
After bath and after needle douche two minutes, cooled to 21° C.	60	150	102	17
Before	72	175	130	25
After bath and after needle douche, cooled to 30° C.	70	160	115	25

The needle douche administered after the bath was taken by the first of these two subjects at a lower temperature (21° C.) than by the second (30° C.); the resulting fall in arterial pressure is therefore less in the former case than in the latter, for the lowering of pressure by the moist heat is partially, though not entirely, abolished by the raising tendency of the cold and percussion.

Effect of percussion.—Experiments I. and IV. show the effect of cold and warm immersion baths in raising and lowering respectively the arterial pressure. Experiment II. shows the effect of percussion added to that of cold and thereby greatly increasing the rise obtained. To ascertain further the effect of percussion a warm needle bath at 38° C. was given with the object of seeing whether the raising effect of percussion would overshadow the lowering effect of the temperature. This was found to be the case, the result being a slight rise in arterial pressure (Experiment VIII.). Contrary to what happened in Experiment I., the venous pressure rose, which tends to show that the peripheral resistance was not increased and that therefore the rise in arterial pressure could not be attributed to this cause. Probably, as in the case of the cold needle bath, percussion leads to an increased output of the heart and this, acting with a diminished peripheral resistance due to the heat, would explain the rise observed in venous pressure. 10 minutes after the bath the mean pressure fell to 105 mm. Hg in consequence of the subject having been wrapped in a warm towel.

EXPERIMENT VIII.—*Warm Needle at 38° C.; Three Minutes.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	72	140	115	15
After	72	145	120	20

Heat and cold alternating.—In the alternating needle bath or Scotch douche, where the temperature is made to rapidly oscillate between warm and cold, the net result is a rise in arterial pressure with a slight fall in venous pressure (Experiment IX.).

EXPERIMENT IX.—*Alternating Needle Bath; Six Minutes; Temperature from 37° to 27° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	60	175	130	25
After	66	190	145	22

Spinal douche.—The addition of a spinal douche to the ordinary needle bath did not seem in any way to enhance its effect, a slight rise in all pressures resulting (Experiment X.).

EXPERIMENT X.—*Needle Bath + Spinal Douche; Six Minutes; Temperature 37°, cooled at finish to 24° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	74	165	110	22
After	70	175	117	25

Saline baths.—To ascertain the effect of mineral constituents in the water the saline-sulphur baths of Harrogate were first experimented with (Experiments XI. and XII.). Of these, the "natural" sulphur bath, consisting of the pure undiluted water raised to the required temperature by passing on its way to the bath through a heated coil, contains about 3·6 parts per mille of total solids, consisting of the chlorides and carbonates of sodium, calcium, and magnesium, the chlorides being largely in excess. Of the chlorides, that of sodium greatly preponderates. The sulphur constituent amounts to about 0·03 part per mille of sodium sulphide, with a small volume of sulphuretted hydrogen gas. The so-called "strong" sulphur bath, consisting of the pure sulphur water raised to the required temperature by admixture with hot plain water, contains about 2·1 parts per mille total solids, the sulphide amounting to 0·01 part per mille.

EXPERIMENT XI.—*Natural Sulphur Bath; 20 Minutes; Temperature 37° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	72	175	125	22
After	68	140	85	20

EXPERIMENT XII.—*Strong Sulphur Bath; 15 Minutes; Temperature 37° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	70	160	120	22
After	70	150	110	15

The result is a very marked fall in arterial pressure in the case of the natural sulphur bath, with an absolute fall, though relative rise, in venous pressure; the strong sulphur bath also gives a fall in mean pressure with a fall, both absolute and relative, in venous pressure. Comparing these with the results of hot and warm plain water baths shown in Experiments III. and IV. the fall in arterial pressure is seen to be much greater in the case of the saline baths at the same temperatures. This water, therefore, would seem to have the effect of enhancing the dilating power of warm temperatures on the peripheral arterioles. How far the effect is to be attributed to the salines in the water and how far to the sulphuretted hydrogen gas we are unable to say.

The artificial *Nauheim baths*, both still and aerated, were next examined. The still baths were made by dissolving 3·2 kilos. of sodium chloride and 85 grammes of calcium chloride in 136 litres of water, giving a proportion of 23 parts per mille and 0·6 part per mille of the two salts respectively. The aerated baths were obtained by the use of Sandow's tablets which contain, in addition to the salines above, a quantity of sodium bicarbonate and citric acid for the production of effervescence (Experiments XIII. and XIV.). The baths were given at the temperatures usually adopted in their therapeutic use, being somewhat lower than the plain water and sulphur baths. As in the case of plain water and of saline-sulphur baths a fall in maximum and mean arterial pressure

EXPERIMENT XIII.—*Still Nauheim Bath; 20 Minutes; Temperature 34° C.; 3·2 Kilos. NaCl. and 85 Grammes $CaCl_2$ to 136 Litres of Water.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	54	190	115	5
After	60	140	95	10
20 minutes after ...	60	155	110	7

EXPERIMENT XIV.—*Aerated Nauheim Bath; 20 Minutes; at 34° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	88	165	125	12
After...	84	140	97	15
30 minutes after ...	84	145	105	20

takes place, though the temperature employed is 34° C. as against 37–38° C. in the former experiments. The fall is greater than that which occurs with plain water and with the strong sulphur bath, though less than that obtained with the natural sulphur bath. This latter example, however, is an extreme case and represents a fall beyond that which usually occurs in this bath. On venous pressure the effect is very marked, both cases showing not merely a relative rise but an absolute increase over the original level. In the case of the still Nauheim bath the subject of the example given had a high maximum arterial pressure with low venous pressure, probably due to a tightly contracted peripheral circulation which the first bath opened up to some extent. A series of baths has a cumulative effect, for in the subject in question the maximum pressure after six baths on alternate days became reduced from 190 mm. Hg to 160 mm. Hg before the bath, and the venous pressure was raised from 5 mm. Hg to 25 mm. Hg. Where the factor of effervescence is added the result is still more marked and endures for some time even after a single immersion (Experiment XIV.).

Saline-sulphur baths having a more potent effect than plain water baths at the same temperature, and Nauheim baths yielding yet more marked results even at lower temperatures, it appears then that if the lowering of arterial pressure and the raising (either relative or absolute) of venous pressure be due mainly to lessened peripheral resistance, as is probably the case, the amount of arteriolar relaxation caused by immersion in warm water becomes progressively greater as the amount of saline material in the water is increased. Up to what point of concentration this augmentation continues we have not yet been able to determine.

MASSAGE.

Lauder Brunton and Tunnicliffe,[4] experimenting on cats and dogs, have demonstrated that massage of a considerable muscular area causes an initial rise in the general blood-pressure which is followed by a considerable fall, amounting in some instances to as much as one-fifth of the original pressure. G. Oliver[5] in a recent series of articles on blood-pressure is "struck by the singularly small and somewhat variable effects produced by massage in the arteries and veins of normal subjects. Local massage," he says, "does not induce any obvious change in the blood-pressure ..... the effect of general massage may be equally negative. I have, however, observed a slight rise in the arterial pressure (mean and maximum) and a doubling of venous pressure; and this observation probably expresses the general drift of the influence of general massage on the circulation in normal subjects." Our observations lead us to the conclusion that general dry massage, in the form known as *pétrissage*, while it may cause an initial rise of blood-pressure of brief duration, produces as the net result a fall in

[4] Journal of Physiology, vol. xvii., 1894.
[5] Edinburgh Medical Journal, November, 1898.

arterial pressure, both mean and maximum, provided the abdomen be not massaged too vigorously. Deep massage and compression of the abdomen causes an immediate rise in blood-pressure by dispersion of blood accumulated in the splanchnic veins into the systemic circulation. The venous pressure we observed to be always relatively, and in some cases actually, raised, the amount of rise appearing to depend to some extent upon the temperature of the room, being greater in a warm atmosphere. We failed to observe with dry massage so marked a rise in venous pressure as is noted by Oliver. Experiment XV. is a typical one selected from several.

EXPERIMENT XV.—*Dry Massage; Heavy Movements; 40 Minutes.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	88	145	95	15
After 40 minutes' vigorous massage to limbs and body (abdomen excluded)..	88	135	85	17
After 7 minutes' deep massage to abdomen	88	160	105	25

Wet massage in the form of the Aix douche in which massage is administered under a warm douche conveyed by a flexible pipe playing between the hands of the masseur causes an increased effect—that of temperature being added to massage. We observed here a greater fall in arterial pressure than was obtained with dry massage and coincidently an actual rise of venous pressure, sometimes considerable. (Experiment XVI.) The subject taking this bath sits in the erect posture, consequently the abdominal massage is but lightly performed.

EXPERIMENT XVI.—*Aix Douche; Temperature 38° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	70	180	135	17
After	64	150	115	25

On the other hand, wet massage in the form of the Vichy douche in which massage is administered under a warm needle spray, the subject being in the recumbent posture, causes a rise in all pressures, maximum and mean arterial, and venous. (Experiment XVII.) The difference between the effect of this bath and of the preceding is no doubt due to, first, the percussion of the needle spray tending to raise the blood-pressure (Experiments II. and VIII.), and, secondly, to the fact that the subject being in the recumbent posture abdominal massage is more efficiently performed and hence a rise in pressure results. Personal experience of the two baths bears out this difference, a feeling of languor resulting after the Aix douche and of exhilaration after the Vichy douche.

EXPERIMENT XVII.—*Vichy Douche; Temperature 38° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before	64	117	85	15
After	66	125	95	22

To illustrate the cumulative effect of the Aix douche the following example may be given, from which it will be seen that the progressive result is a considerable lowering of arterial pressure and raising of venous pressure. (Experiment XVIII.) The observations were made on a patient suffering from chronic renal disease.

EXPERIMENT XVIII.—*Series of Aix Douches; Temperature 37–38° C.*

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before (sitting) ...	100	240	155	15
After four baths (sitting)	96	215	130	25
After 12 baths (sitting)	86	180	110	30

Our observations, therefore, are in agreement with the experimental results obtained by Brunton and Tunnicliffe that massage lowers the general blood-pressure, but they are somewhat at variance with the statement of Oliver that a rise in arterial pressure expresses the general drift of the influence of dry massage on the circulation, unless he refers to the initial transitory rise frequently obtained. He does not state, however, whether massage of the abdomen was carried out in his experiments; presumably it was, as this is the general course adopted, in which case our observations fall into line with his, for, as has been shown, vigorous abdominal massage will abolish the fall produced by massage of the limbs and rest of the body and cause a rise in arterial pressure; where this is but lightly performed the net result is a fall. The influence of warm temperatures plus massage, as in the Aix douche, is to considerably augment this fall. In all probability the factor primarily and chiefly disturbed by massage is the peripheral resistance rather than the output of the heart and the result is to be attributed mainly to diminished resistance from arteriolar dilatation.

EXERCISE.

The effect of exercise on the blood-pressure has been examined by many observers with somewhat conflicting results. Marey[6] as the result of his experiments found the blood-pressure to be raised during severe muscular exercise, but to be lowered after cessation of exertion. Oertel[7] and others found a considerable rise in blood-pressure following muscular exercise. Lauder Brunton and Tunnicliffe,[8] observing the effects of resistance exercises on the circulation, using the sphygmomanometer of Mosso, found an initial rise in arterial pressure to take place soon after commencement of the exercises. During their continuance the blood-pressure fell to its original level and continued falling after cessation of movement, the fall lasting about half an hour afterwards, when it gradually rose to its initial height. They discuss the probable cause of the discrepancy between their results and those of previous observers and refer it to the different amount of exercise taken. In the case of the earlier observers the exercise taken was more severe and sufficient to increase the frequency of pulse and respiration, while in their own experiments with resisted movements the exercise was of a much gentler nature, insufficient to accelerate either pulse or respiration. They consider the fall in pressure following the exercises to be due in great part to the dilatation which occurs in the peripheral muscular area. The initial rise in pressure they refer in part to reflex cardiac stimulation and in part to the diminution in calibre of the peripheral muscular arteries which occurs during the shortening of the muscles which are called into play. The latter factor they consider the most potent. To account for the fall in pressure that occurs while the muscles are still contracting they suggest the possibility of a vaso-dilating substance being produced by the contraction of muscle. Leonard Hill[9] recently has shown that such moderate exercise as rising from the sitting posture, walking a few steps, and again sitting down is sufficient to slightly raise the mean arterial pressure, the pulse-rate being also raised, while severe exercise in the form of a rapid run causes a considerable rise in pressure, the frequency of pulse and respiration being, of course, increased. The rise thus obtained is of brief duration, the pressure falling to normal within half an hour after exercise and before the pulse-rate has fallen to its initial frequency; subsequently, however,

[6] La Circulation du Sang. Paris, 1881.
[7] Handbuch der Allgemeinen Therapie der Kreislaufs-Störungen. Leipsic, 1891.
[8] Brit. Med. Jour., vol. ii., 1897.
[9] THE LANCET, Jan. 29th, 1898.

the pressure falls below its original level. Oliver[10] agrees with the general conclusion that exercise raises the mean arterial pressure, but he finds that this result is by no means invariable, the mean pressure, according to him, remaining stationary or even falling in some subjects after exercise. He considers the invariable result of exercise, moderate or severe, to be a rise in maximum pressure, which, he says, is due to increased energy of contraction of the ventricle. Whether the mean pressure becomes lowered or raised depends, he maintains, on the relation between the amount of arteriolar relaxation at the one end and the force of the ventricular pump at the other; the former being excessive without undue increase in the latter a fall in mean pressure results, and *vice versâ* a rise. He further states that it is in subjects with a high mean pressure and relatively low venous pressure—that is, in subjects in whom peripheral resistance is high—that a fall in mean pressure is likely to follow exercise, and that when it does a marked rise in venous pressure occurs.

In the endeavour to throw further light on the subject we examined the effects of exercise of various grades of severity from gentle resisted movements upwards through dumb-bell exercises requiring a gradually increasing amount of exertion to the strenuous labour of cycling rapidly uphill, with results which are tabulated below. After corroborating the observation of Hill that the mere rising from the sitting posture and walking a few steps raises slightly the mean pressure we found that if the blood-pressure be taken in any position with the muscular system relaxed, the rendering of the skeletal muscles throughout the body tightly rigid without holding the breath has the effect of at once raising the pressures—maximum, mean, and venous—to a considerable extent, the pulse frequency being also raised. (See Exercise I.). A transient fall in venous pressure may sometimes be noted immediately the muscles contract, probably from constriction of peripheral muscular arteries by contracting muscle fibre; the fall, however, rapidly gives way to a rise. These changes may be explained as partly the result of increased output of the heart, as indicated by the moderate increase in the rate of beat, and partly the result of diminished capacity of the vessels; and the influence of an increased amount of carbonic acid in the blood must not be overlooked.

With resistance movements performed gently without causing a rise in the pulse-rate we obtained results corroborative of those of Brunton and Tunnicliffe—viz., an initial rise (or delayed fall, as in the example given) in mean and maximum arterial pressure, followed by a fall during continuance of movement, with a further fall subsequently and a gradual rise to normal, the venous pressure rising as the arterial pressure falls (Exercise II.). Where, however, the resistance was made stronger and the exercise became such as to increase the frequency of pulse and respiration a rise in maximum pressure resulted, with a fall in mean pressure and a trebling of venous pressure (Exercise III.). If the difference between the mean and maximum pressures, compared with the mean pressure as taken by the instrument, be any guide to the amount of force with which the blood is discharged it would appear that this must be here increased, and inasmuch as the mean arterial pressure is lowered the amount of peripheral dilatation must be such as to more than counterbalance the effect of increased output, which would tend to raise the mean pressure if other factors remained constant.

Dumb-bell exercises were next taken, those advocated by Sandow[11] being chosen as putting into action successively the main groups of muscles in the body. When slowly and deliberately performed, to avoid quickening either pulse or respiration, an initial rise in all pressures occurred with a subsequent fall during the exercise in arterial pressures, and a further rise in venous pressure, the return to normal being complete in 20 minutes after cessation of exercise. (Exercise IV.). This result is practically identical with that given by gentle resisted movements. The same exercises performed more rapidly and vigorously gave as the net result a lowering of mean pressure with slight rise in maximum pressure and a doubling of venous pressure, the exercise apparently increasing the output of the heart without disturbing the rate of working (Exercise V.). When performed more rapidly still and with great vigour in order to quicken the pulse the initial rise in arterial pressure became more marked, increased as the exercise continued, and was sustained to the end, the venous pressure showing a marked rise. Afterwards, however, the mean pressure fell to below normal, while the maximum and venous pressures also fell slightly but still remained well above normal. The effect was of brief duration, for 25 minutes after discontinuing exercise the arterial pressures regained their original level, the venous pressure remaining slightly raised (Exercise VI.). The violent exertion of cycling rapidly uphill against a strong wind caused a rise in maximum pressure with a rise to a less extent in the mean pressure and a large rise in venous pressure, respiration and pulse-rate being greatly accelerated. The arterial pressures fell after exercise to below normal, while the venous pressure rose higher, as occurred in the preceding case, of which this is merely an exaggeration. The length of time that elapsed before the starting-point of pressure was regained was greater after the more severe exercise (Exercise VII.). In these two instances the marked rise in venous pressure would seem to indicate a considerable degree of peripheral dilatation. In endeavouring to account for the rise in arterial pressure the effect of increased CO_2 must again be considered. Possibly the rise may be attributed partly to this cause and partly to increased output of the heart, notwithstanding Stewart's statement that where the pulse-rate is greatly increased the output per heart beat is diminished and the output per second may or may not alter but is usually also diminished.

I.—Rigidity.

—	Pulse-rate.	Arterial pressure, mm. Hg.		Venous pressure, mm. Hg.
		Maximum.	Mean.	
Before (sitting)	72	185	135	25
Muscles rigid (sitting)	86	200	150	35
II.—Resistance Exercises (gentle).				
Before (sitting)	74	175	120	10
After five minutes' exercise (sitting)...	74	175	130	10
After 20 minutes' exercise (sitting)...	68	165	120	20
10 minutes afterwards (sitting)..	68	160	115	20
25 minutes afterwards (sitting)..	68	175	130	10
III.—Resistance Exercises (more severe).				
Before (sitting)	84	165	125	7
After 15 minutes' strong resistance exercises, respirations increased (sitting)	94	175	110	22
15 minutes after (sitting)	84	165	105	17
35 minutes after (sitting)	84	165	120	10
IV.—Sandow's Exercises (5 lb. dumb-bells, very slowly performed).				
Before (sitting)	75	187	150	20
After seven minutes' exercise (sitting)...	75	195	155	25
After 15 minutes' exercise (sitting)...	74	175	135	30
20 minutes after (sitting)	75	185	150	20
V.—Sandow's Exercises (5 lb. dumb-bells, moderately severe).				
Before (recumbent)	66	155	125	7
After 25 minutes' exercises (recumbent)	66	160	110	15
VI.—Sandow's Exercises (5lb. dumb-bells, severe, and rapidly performed).				
Before (sitting)	66	160	120	15
After two-arm and two-leg exercises rapidly done (sitting)	84	175	130	27
After exercises 3-6* (sitting) ...	84	170	125	33
After exercises 7-12* (sitting) ...	94	185	135	37
After whole series, 20 minutes (sitting)...	96	180	125	35
Five minutes after (sitting) ...	81	170	110	30
15 minutes after (sitting)	72	165	115	27
25 minutes after (sitting)	68	160	120	20

[10] Edinburgh Medical Journal, October, 1898.
[11] Strength and How to Obtain it, by E. Sandow. London, 1897.

VII.—Hard Cycling (one mile uphill against strong wind; cold day).

Before (standing)	78	175	140	15
After (standing)	160	205	160	35
10 minutes after (standing)... ...	120	165	135	40
20 minutes after (standing) ...	100	167	135	45
35 minutes after (standing)... ...	96	173	130	37
50 minutes after (standing)... ...	90	175	140	25
65 minutes after (standing)... ...	90	175	140	17

* These numbers refer to exercises as numbered in Sandow's book.

It would appear, then, that these observations support the conclusions of Brunton and Tunnicliffe that the effect of exercise on the blood-pressure will depend on the nature and severity of the work performed. The first effect of all ferms is to raise the arterial pressures to an extent roughly proportionate to the amount of exertion, probably because increased output of the heart tending to raise the pressure is in excess of peripheral dilatation tending to lower it, the arterioles being as yet unrelaxed. If continued exercise be such as to markedly increase the frequency of the heart beat a rise in pressure results which is maintained throughout the exercise if that be severe, the factors tending to raise the pressure (whether increased output, diminished oxidation, or others) more than compensating for the widening of the periphery. On the other hand, if the exercise be less severe and the pulse-rate be not disturbed, arteriolar relaxation takes place while the output apparently may remain the same or at least be not greatly increased, so that a fall in pressure occurs. In all cases the venous pressure rises, the extent of rise being in some degree a measure of peripheral dilatation. After exercise of all kinds the arterial pressure falls below its original height, the venous pressure remaining raised, and the starting point of both is regained in from 20 minutes to an hour afterwards.

The result obtained may vary to some extent with the condition of the subject experimented upon as to being accustomed or not to exercise, inasmuch as moderate exercise may be to him relatively severe. Temperature also appears to be a factor of moment in determining the result, for the fall in pressure after moderate exercise is greater on a warm day and the subsequent return to normal occupies a longer period than in cold weather.

Summary.—1. Cold baths raise the arterial pressures, maximum and mean, and lower the venous pressure; after reaction the arterial pressure falls and the venous pressure rises. 2. Percussion added to cold increases the rise in arterial pressure. 3. Warm baths of plain water lower the arterial pressures and both absolutely and relatively lower the venous pressure. 4. Turkish baths lower the arterial and venous pressures to a greater extent though the fall in venous pressure is proportionately not so great as that in arterial pressure. 5. Saline baths at warm temperatures lower the arterial pressures to a greater extent than plain water baths at the same temperatures; the venous pressure, though absolutely lowered, is relatively raised; where the amount of saline material in solution is considerable a further lowering of arterial pressure takes place while the venous pressure becomes absolutely raised. 6. Dry massage lowers the arterial pressures and relatively or absolutely raises the venous pressure, provided the abdomen be not massaged too vigorously; when this is done a rise in all pressures occurs. 7. Warm temperature *plus* massage, as in the Aix douche, has a more powerful effect in the same direction than dry massage alone. The effect of a series of Aix douches is cumulative. 8. The effect of exercise on the blood-pressure depends upon the severity of exertion. In all forms an initial rise in arterial pressure occurs; if the exercise be mild a fall occurs during its continuance; if severe the rise is maintained; after exercise, moderate or severe, a fall takes place. The venous pressure is raised during all forms of exercise and remains raised during the subsequent arterial fall. The return to normal after exercise takes place more or less rapidly according to the gentleness or severity of the exercise and the temperature of the atmosphere.

THE Société d'Obstétrique, de Gynécologie, et de Pédiatrie de Paris have elected Dr. George Granville Bantock Membre Associé Étranger (Section de Gynécologie).

DOUBLE PNEUMONIA IN THE SIXTH MONTH OF PREGNANCY; MISCARRIAGE; RELAPSE; RECOVERY.

BY THOMAS OLIVER, M.A. DURH., M.D. GLASG., F.R.C.P. LOND.,

PHYSICIAN TO THE ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

IN forming a prognosis of pneumonia the circumstances that guide us are the extent to which the lung is involved, the age, habits, and physical condition of the patient, the presence of complications, and the height of the fever. A double pneumonia is always a more serious affection than when part of one lung alone is involved. Pneumonia is in most instances a localised expression of a constitutional disease owning a microbe for its cause, and death comes from cardiac failure or paralysis of the respiratory centre. When inflammation of the lungs occurs in a woman far advanced in pregnancy, when her blood is so altered physiologically as to be pathological, the distended abdomen by preventing easy descent of the diaphragm creates a fresh mechanical obstacle to the breathing, thereby endangering life the more.

On Feb. 13th I was asked to see in consultation with Dr. Taylor of Chester-le-Street an apparently healthy and well-developed woman, aged 28 years. She was lying in bed with her shoulders elevated, her face flushed, and she was breathing with difficulty. There was no question as to her previous health or temperate habits. She was the mother of two children and was near the end of the sixth month of pregnancy. Six days before I saw her—i.e., on Feb. 7th—she had gone to a concert and had felt very chilly when in the room and again after leaving the hall. There was, however, no rigor. On the following day there was a shiver and she complained of pain in her left shoulder. That evening her temperature rose to 102° F. and on the next day there were altered breath-sounds at the base of the left lung. On the 10th there was dulness with tubular breathing, both of which gradually became more pronounced. Next day very severe pain was complained of over the right costal arch and on the following morning—the day before I saw her—the base of the right lung, like the left, had become dull and was the seat of tubular breathing. On the occasion of my visit the expectoration was viscid, of rusty colour, scanty, and difficult to remove from the mouth. Owing to pain in both sides of the chest the patient could only lie in the recumbent position. The pulse was 126, the respirations were 48, and the temperature was 103°. There was very marked hyper-resonance in front and at the sides of the chest and the breath sounds were coarse in front. The heart sounds were normal, but distinct pericardial friction could be heard as the root of the large vessels was approached. Posteriorly the chest was absolutely dull on both sides from the mid-lung downwards. The breath sounds were extremely tubular over the left base where there were crepitation, exaggerated vocal fremitus, and vocal resonance. The lower half of the right chest was also absolutely dull and there was heard loud tubular breathing. The abdomen was very much enlarged and was mechanically causing embarrassment to the breathing. The distended uterus could be palpated two inches above the umbilicus and the fœtal movements, which were hitherto extremely active, had not for several hours been felt. The bowels were constipated. The patient had taken her food well, but since the commencement of her illness there had been, practically speaking, no sleep beyond snatches of a few minutes' duration. There had been mild delirium. She was taking a mixture of solution of strychnia, tincture of digitalis, and cinchona, which it was not considered necessary to alter. Sinapisms were applied to the sides of the chest and a draught of bromidia was ordered to procure sleep if possible. The most important question which Dr. Taylor and I had before us for consideration was whether we should or should not induce premature labour. It was only too apparent that the pregnancy was a serious complication and that if it could be got over quickly breathing would be relieved; on the other hand, there was the possibility that the patient might die during the labour—a process necessarily somewhat tedious since nature was not

prepared for the event, and besides there was just the chance that the problem would be solved by miscarriage. We decided not to terminate the pregnancy.

The after-course of the illness is extremely interesting Two or three hours after I left her she was seized with labour pains. These came on at 10.45 P.M., and before 11.5 P.M., when Dr. Taylor reached her, the child was born. There is some doubt as to the whether the child was born alive; but it was dead on Dr. Taylor's arrival. There was no trouble with the placenta and the lochia, though scanty, remained healthy throughout. The interesting and fortunate circumstance in regard to the confinement is that while we rather dreaded a miscarriage on account of the compulsory holding of the breath which expulsion pains naturally cause the labour was completed in less than 20 minutes, and it seemed as if the act of parturition disturbed the patient very little. No necropsy was made upon the infant. Once the mother's temperature began to fall to 100° she was overcome by sleep, at times so profound as to overpower her even when engaged in ordinary conversation. It was a deeper somnolence than ordinarily occurs after pneumonia. By Feb. 26th the patient was well again. She had been up for a few days, her pulse and temperature having been normal, but on this date she was again seized with pain in the right chest and on the following day there was distinct dulness with tubular breathing over the upper part of the left mid-lung posteriorly; her pulse rose to 120 and her temperature rose to 102°. The expectoration which had been absent for several days again returned and it was observed to be rusty once more. On the third day after the relapse the pulse fell to 100, the temperature declined to 100·5°, the respirations to 24, and the patient expressed herself as feeling comfortable and free from any pulmonary embarrassment. It was not until March 5th, however, that the lung showed signs of clearing up and the temperature stood at 99° morning and evening. The urine never contained albumin. The first attack of pneumonia lasted 11 days, but the second was of only seven days' duration and was unaccompanied by the extreme prostration and the hurried and anxious breathing noticeable in the original illness. That it was a veritable relapse was shown by a bacteriological examination of the sputum. Some of the expectoration of March 4th was sent to Dr. Hardcastle, demonstrator of bacteriology in the Durham University College of Medicine, and he reported (1) as the result of staining that the sputum contained pneumococci; and (2) that in an agar-agar cultivation the colonies appeared like drops of dew on the agar which when examined microscopically proved to be diplococcic. That the micro-organisms were pneumococcic is beyond dispute.

When pneumonia attacks a pregnant woman there is naturally a risk to both the mother and the child. Miscarriage takes place in a very large percentage of these cases. The death-rate, too, is high. In Hirst's "American System of Obstetrics" mention is made of 43 cases of pneumonia occurring during pregnancy. In 21 of these there was premature expulsion of the fœtus. 28 of the 43 patients had not passed the sixth month of pregnancy, and of these 11 aborted, while of the remaining 15 who had exceeded this period the pregnancy terminated prematurely in 10. From these statistics it would appear as if the tendency to abortion increased with the advance of pregnancy. Of the 15 women seized with pneumonia after the sixth month of pregnancy seven died. It was Tarnier's opinion that "the more advanced the pregnancy the greater the probability of an expulsion of the fœtus and the graver the prognosis for mother and child."

My own experience leads me to express the opinion that so far as treatment is concerned it is better not to attempt to end the pregnancy. It was only too apparent in our patient that if the uterus could have been rapidly emptied there would have been a gain of air space to the mother, but those of us who have had to empty a pregnant uterus short of the full term know the difficulties of the process and are aware of the risks to which maternal and fœtal life are exposed. Nature will neither be taken unawares nor will she be hurried beyond limits at this particular period. The induction of premature labour, however rapid, is always tedious and a woman may die during the operation. The muscular pains and the sudden expulsion of the fœtus act too frequently like surgical shock to the mother. Add to these pneumonia and what can be the effect of strong expulsive pains with suspended respiration but for more blood to be thrown into already damaged lungs and an extra strain imposed upon the heart? In the treatment of disease we rely upon experience. What, then, is the verdict of experience in regard to the induction of premature labour when severe pneumonia complicates pregnancy? Statistics certainly do not favour obstetrical interference. Of 18 women who were the subjects of pneumonia and in whom the pregnancy was interrupted Matton[1] informs us that nine died, while of 20 women suffering from pneumonia but whose pregnancy was not interfered with only one died. As regards the children born under these circumstances it may be said that most of them are born dead or die very shortly after birth and when a necropsy has been made the lungs have been found affected and the internal organs congested.

Pneumonia itself tends to terminate a pregnancy. Nearly one half of the women who are affected abort. In all these cases fever is an important element; it increases the danger by quickening the respiration and causing cardiac failure. Pneumonia interrupts pregnancy in about one-third of all cases before the sixth month and in two-thirds between the sixth and ninth months. The maternal mortality may reach 50 per cent., while that of the fœtus rises higher, being probably nearer 80 than 50 per cent. It is needless to add that when labour occurs in pregnancy complicated by pneumonia it is the duty of the practitioner if the parts are at all dilateable and the head presenting to shorten the process as far as possible by the gentle use of the forceps, keeping an eye on the patient afterwards for cyanosis. Should this develop he should not be in too great a hurry to check any reasonable amount of bleeding that may be present.

Newcastle-on-Tyne.

A CASE OF ULCERATIVE ENDOCARDITIS TREATED WITH ANTI-STREPTOCOCCIC SERUM.

BY BERTRAM M. H. ROGERS, B.A., M.D., B.CH. OXON.,
PHYSICIAN AND PATHOLOGIST TO THE ROYAL HOSPITAL FOR SICK CHILDREN AND WOMEN, BRISTOL.

ANTI-STREPTOCOCCIC serum is still on its trial and the following case may be recorded without prejudice and help to define its value as a remedial agent. I say "without prejudice," as a single case, though it may be as complete as the one now described, is of little value, but taken in conjunction with the others already reported and possibly with others still to appear it will be useful. Though recoveries have been recorded the disease is almost universally fatal, so that any serum or other agent which would counteract the toxin would be most acceptable. The chief difficulty lies in the fact that we have to deal with a disease in which the infection may be caused by several distinct micro-organisms, or a group of organisms, while the symptoms appear the same in every case. It is only by a cultivation from the blood in each case that the cause can definitely be ascertained and as yet we have a serum to counteract the toxin of streptococci only, and it is even doubtful whether it will cure every case of streptococcic infection. The present case was so typical clinically of ulcerative endocarditis that it need only be reported in brief.

A boy, aged 10 years, was admitted into the Royal Hospital for Sick Women and Children, Bristol, in October, 1898, with acute rheumatism of the big joints. There was a soft systolic murmur at the apex of the heart. Under treatment the swelling of the joints disappeared, but the temperature continued between 100° and 103° F. The patient then developed pleurisy in the left axillary region and some bronchitis. These in their turn got better, but the spleen became enlarged and tender. The temperature continued high and a double murmur developed at the base of the heart, and a trace of albumin appeared in the urine. Diagnosing the condition to be one of ulcerative endocarditis of the aortic valves I asked Dr. J. O. Symes, the bacteriologist to the infirmary, to examine the blood bacteriologically. He reported as follows, the blood being examined on Nov. 28th, 1898: "Two cubic centimetres of blood were taken from the arm in the following manner. A tape was tied tightly round the upper arm midway between

[1] Journal de Médecine de Bruxelles, 1872, p. 412.

the shoulder and the elbow. The skin over the front of the elbow-joint was disinfected by treating with ether and then with perchloride of mercury. The needle of a sterilised hypodermic syringe was then plunged into one of the distended veins in the disinfected area and the blood drawn off and spread on agar tubes and incubated for 24 hours. It showed a pure cultivation of streptococci. A second specimen, taken on Dec. 2nd, also showed after incubation a pure streptococcic growth. Blood films stained direct showed diplococci, probably streptococci, in one specimen." The case therefore seemed a very suitable one for treatment with anti-streptococcic serum and accordingly on Dec. 11th, 13th, 16th, 18th, and 19th 10 cubic centimetres of serum, which was obtained from the Jenner Institute through a local firm, were injected. The effect was absolutely *nil* as regards improvement. The condition of the heart remained the same, the fever continued as before, and the spleen remained large and tender. Moreover, the injections were extremely painful, the boy screaming with pain on each occasion of their administration. On this account and because they produced no good effect no further injections were given. They did no harm and that is about all that can be said about them. The boy's condition remained as unsatisfactory as before, double murmurs developed at the base of the heart, the spleen became very tender, and at times rheumatic pains returned in various joints. In addition he had a very tender spot in the left popliteal space with œdema of the leg and foot and at another time great swelling of the scrotum. The patient became emaciated to a shadow and died on Jan. 9th, 1899, with indistinct evidence of brain trouble.

The necropsy was performed by myself about 24 hours after death. On opening the abdomen some quantity of clear fluid escaped and the omentum had a dark green appearance due to lines of dark pigmented matter running beside the vessels. This is an appearance I do not recollect having ever seen before. Scattered about the intestines were a few bright red spots due to small infarcts which were evidently of quite recent origin. The spleen was large, weighing 17½ ounces, and was firmly adherent to the diaphragm, the stomach, and the omentum. Though it was with the greatest care that I attempted to remove it a small tear was made from which a large bead of thick yellow pus oozed out. Dr. Symes who was present immediately inoculated a tube with a sterile wire and made a cover-glass preparation. The results will be referred to later. In the spleen there were five infarcts, all but one of which were of the usual yellow colour, and this was of large size and of a deep red colour. The liver was large and like a nutmeg in appearance, such as one would expect to find in a person who had suffered for some time from the condition of the heart which this patient had. The heart was much dilated and hypertrophied. The valves on its right side were healthy, but those on the left were much diseased, the mitral being slightly thickened and the aortic almost entirely covered with immense vegetations. By some fortuitous circumstance in opening the heart the scissors passed between the anterior and right posterior segments so that the valves were not divided and the exact condition of all three was preserved. The anterior valve had no vegetations on it but was much smaller than it should have been and had lost its corpus Arantii in the centre. It was evidently incompetent. The left posterior had two of the longest vegetations which it has been my fortune to see, one in the recent state being nearly half an inch long. The right posterior had also a large vegetation, while above it and also above the left were small growths on the surface of the aorta. A tube was inoculated from the blood of the heart by Dr. Symes before the organ was opened. Both lungs were healthy, both pleural cavities contained a small quantity of clear fluid, and the mediastinal tissue was œdematous. In the left axillary region were some long fibrous adhesions which looked just like the strings of a harp. The kidneys were normal except for slight congestion of the pyramids and contained no infarcts. The brain was normal but in the right anterior cerebral artery a small clot was found which was pale in colour and not adherent to the wall of the vessel. It was evidently a recent embolus. The cultivations which were made at the post-mortem examination showed a mixed growth of streptococcus and staphylococcus aureus and the cover-glass preparations also showed both organisms.

It appears to me that in order to get favourable results from anti-streptococcic serum we must be sure of three facts: (1) that there is endocarditis, (2) that the endocarditis is infective, and (3) that the infection is due to streptococci. In this case all three facts were certain, although I am quite ready to admit that at the time of death staphylococci were present. How they gained access is another matter. They were not present on the two occasions when the blood was examined during life, so I was quite justified in expecting good results—if good results are to be got—from the serum. I find that several cases have been reported in medical periodicals of similar conditions treated by serum. Dr. Sainsbury[1] has reported the case of a boy, aged 13 years, who was injected with 70 cubic centimetres in six doses. Streptococci were cultivated from the blood and the patient recovered. Dr. Sainsbury mentions another case in which the result was unfavourable, but the patient had extensive kidney disease which may have counteracted or prevented the good effect of the serum. Dr. Fox[2] reports the case of a man, aged 36 years, who had 20 injections and who died. No micro-organisms were found till the post-mortem examination when streptococci were cultivated. Another case is reported by Dr. Washbourn,[3] that of a woman, aged 20 years, who after the injection of 1030 cubic centimetres of serum recovered. The improvement was noticeable very soon but no examination of the blood was made. A successful case is published by Margaret Pearse[4] in which the patient was a girl aged 16 years and 87½ cubic centimetres were injected in eight doses. No examination of the blood was made till after the treatment was begun, which may account for no micro-organism being found. Ulcerative endocarditis is not always caused by streptococci alone, for there are cases of mixed infection and others in which the cause appears to be due to pneumococci or gonococci or others, and no means exist of knowing to what the infection is due except cultivations of blood drawn direct from a vein. This requires special skill and experience and I am much indebted to Dr. Symes for the trouble he took over this case. How often the infection is due to streptococci is also unknown, but Kanthack[5] found it present in about a third of the cases he examined.

I cannot help feeling that as yet the good effect of the serum in these cases has to be proved. No doubt to cure ulcerative endocarditis or even relieve it is a severe test to which to put it. I can only hope that others who have had experience, whether favourable or unfavourable to the serum, may be induced to publish their results, so that we may be able to judge as to its real value from a good number of cases.

Clifton, Bristol.

ON SYSTEMATIC MUSCULAR DEVELOPMENT AS A RADICAL CURE OF HERNIA.

BY A. A. WARDEN, M.D. GLASG.

THE occurrence of a hernia is due to a lack of balance between the intra-abdominal pressure and the resistance of the parietes. The one or the other element may be the predominant factor—i.e., the muscular and aponeurotic development may be fairly normal and only give way under the stress of a sudden and excessive strain, or they may be poorly developed and what may be termed a normal effort suffices to produce the hernia. Practically all herniæ are situated at those parts of the abdomen where the integrity of the parietes is impaired by the exit or passage of vessels, nerves, or other structures—e.g., the inguinal ring with the spermatic cord, &c., the femoral arch with the femoral vessels, &c., the umbilical ring where were situated the fœtal structures, the obturator foramen, &c.

It is unnecessary to go into much anatomical detail for there are perhaps few subjects of surgical importance which have been more discussed, investigated, and written about than that of hernia from every point of view. I may venture, however, to refer to one or two details which though well

[1] THE LANCET, Oct. 17th, 1896, p. 1079.
[2] THE LANCET, Feb. 20th, 1897, p. 520.
[3] THE LANCET, Sept. 18th, 1897, p. 707.
[4] THE LANCET, July 10th, 1897, p. 92.
[5] Edinburgh Medical Journal, vol. ii., 1897, p. 13.

known seem to bear a new importance in support of the present thesis. 1. The deeper of the two layers of the superficial abdominal fascia contains much yellow elastic tissue capable of development.[1] It forms one of the strongest of the various portions of the abdominal wall and is more or less intimately connected with the external oblique muscle and its fascia. 2. The intercolumnar fibres which extend partially across the superficial abdominal opening in the aponeurosis of the external oblique muscle are "slender" and send a "thin membrane" downwards upon the spermatic cord.[2] The "internal pillar" which goes to form Gimbernat's ligament sends a reflection of fibres upwards and inwards which reach the middle line and become incorporated with the sheath of the rectus muscle. 3. The aponeurosis of the internal oblique is inseparably united with the aponeurosis of the external oblique and that of the transversalis. 4. The transversalis fascia is, thanks presumably to nature's prevision, strongest in the lower part of the abdomen and encloses, as it were, the femoral vessels as they pass under Poupart's ligament. From the margins of the opening of the internal abdominal ring the "delicate" infundibuliform fascia is prolonged upon the cord or the round ligament.[3] I contend that each and all of these structures, which are of vital importance in the production of all herniæ, are capable, by suitable measures, of great increase in vascularity in muscular and aponeurotic substance, and therefore in thickness and resistance to the extrusion of any viscus.

Although not a few surgeons operate upon hernia in infants of two and three years of age and under, it may, I think, be considered the more general practice to recommend the prolonged use of a well-made truss. Every practitioner has many cases in his mind's eye in which this treatment has been successful as a "radical"—i.e., complete—cure, and adult life is reached without any signs of the old hernia. As Mr. Eccles remarks in his paper on the Treatment of Inguinal Hernia in Children,[4] "permanent closure of the processus vaginalis will be obtained in the majority of cases only after a continuous action of the pressure of a spring truss over a period of some years. A cure, therefore, can be safely predicted, but the truss should not be discarded until the child has reached the age of at least three years." Such a result can only be explained by the development of the child and a gradual process of more or less complete closure of the hernial sac.

In adults, however, the case is different and if the verdict of the surgeon be cast for treatment by bandage it is rare that an expectation of "cure" is held out, the patient being rather bidden to choose between the alternatives of operation with cure or a truss for the rest of his life with constant exposure to descent of the hernia, irreducibility, and even strangulation—the truss, that is to say, is regarded merely as a palliative measure.

Now, the operative treatment of a small hernia in a young adult is not to be entered upon lightly. It is a plastic operation and yet a major one. An untoward result, though rare, is yet one of the most terrible "calamities of surgery." Nor is the profession decided as to the best method of operating, almost every eminent surgeon having given his name to one or other procedure. "Plurima leges corruptissima respublica," remarks Tacitus, and it may safely be said that as no one method has generally superseded all others so we are still looking out for an infallible operation, operative treatment remaining in many cases an ultimate necessity. Taking as a type the ordinary small reducible inguinal hernia my treatment is as follows. 1. Keep the hernia within the abdomen continuously and permanently by means of a well-applied truss which may be changed for another of stronger pressure, of greater mobility, of different material, &c., as circumstances may demand. 2. Systematically develop by suitable exercises to the greatest extent possible the muscular and aponeurotic structures of the abdominal wall.[5] A few words upon each of these two points.

1. *The truss.*—The hernia once recognised, and the truss properly applied, must not be allowed to descend. One such complete descent may annul the results of weeks of treatment. A special truss should be used when the patient is in the bath and, if necessary, even when in bed in the horizontal position. On no account must the bowel enter even the internal inguinal aperture. As to the truss the French and English forms differ considerably and on the whole I think the former is to be preferred on account of its greater simplicity and lightness. During some of the exercises prescribed the truss may be dispensed with altogether as the patient is on the horizontal plane with the pelvis possibly a little raised, or a lighter, more mobile truss which permits greater freedom of movement may be used. Such are well made by Rainal Brothers, Paris.

2. *The muscular development.*—I do not think that it will be denied that when a truss is worn the advice is usually given to the wearer to avoid all muscular effort. The consequence is that a more or less sedative life is led, the abdominal parietes atrophy muscularly rather than gain strength, or adipose tissue is formed, and the inguinal canal becomes less and less resistant to the extrusion of the hernia. On the contrary, I advocate the practice of all such muscular effort as will not tend to force the hernia into its sac and if the truss be an adequate one there are few reasonable exercises that need be forbidden. Those who have examined some of our public school or university athletes must have been struck with the extraordinary part taken in their general muscular development by the abdominal muscles. When contracted the tendinous intersections of the recti are well-marked hollows and the mass of the obliques at each side is not only easily distinguishable but becomes actually prominent. Gymnasts and "strong men" show this to an even greater extent, and if the inguinal canal of such subjects be examined it is surprising to find how small and how firm the internal ring is and how much slighter the impulse upon coughing is than can be elicited in the more normal individual.

I have followed a number of cases now in which a great increase of development has been obtained in three months, six months, or a year by patient and suitable training. The means used may be simple movements as indicated in the Swedish system, better still by resisted movements by means of one or other of the "exercisers" now in such popular and varied use. It is probable that the abdominal muscles contract more or less together and that isolated action of one or other is exceptional. In sitting up, for instance, the obliques aid the recti muscles, but in rotation with fixture of the pelvis the share of the recti muscles must be insignificant. The action of these muscles varies according as the vertebral column, the pelvis, or the thorax are fixed. They are also thrown into a state of contraction when any violent muscular effort is made, thus bracing the parietes of the abdomen and supporting its contents. They come into use in forcible expiration and in efforts of expulsion from the thoracic and abdominal cavities.

The common sense, therefore, both of the surgeon and of his patient will suggest the simple exercises necessary or expedient. Among the best are the following. 1. The patient, with his hands at his side, raises himself from the dorsal decubitus to a sitting posture 20 or 30 times twice or oftener a day. 2. Similarly, from the horizontal position, let both legs be raised from the ground almost to the perpendicular. This also 20 or 30 times till there is distinct fatigue. 3. Modify the first of these three exercises by raising the body sideways in a rotatory movement and thus exercise the obliques. Similar modifications may be introduced by extending the arms during the movements, by the use of dumb-bells or exercisers, and so on.

Paris.

[1] Quain, tenth edition, vol. ii., part 2, p. 327.
[2] Loc. cit., p. 329.
[3] Loc. cit., p. 336.
[4] Brit. Med. Jour., May 13th, 1899, p. 1148.
[5] This last principle is gradually being recognised in France—usually the last country to appreciate the value of physical exercise—and Lucas-Championnière considers the bicycle to be the ideal form of exercise for the subject of hernia both when wearing a truss and after having been operated upon.

COMPLIMENTARY DINNER.—On May 26th Mr. Robert Stirling, M.B., C.M. Glasg., of New Cumnock, Ayrshire, on his leaving the burgh, where he had been in practice between eight and nine years, was entertained to dinner at the Afton Hotel by his friends in testimony of their high regard for him.

LLANELLY HOSPITAL.—The annual report of the Llanelly Hospital for 1898, which has just been issued, states that at the end of 1897 the institution had an unfavourable balance of £1000, but that at present there was a balance in hand of £192. The committee had found it necessary to reduce the number of beds, but doubtless this number would now be increased. The average weekly cost per patient was 9*s.* 2½*d.* for maintenance and 13*s.* 6*d.* for administration. Mr. Studt had offered to guarantee a sum of £500 for the next two years conditionally upon the working men doubling their subscriptions.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON A CASE OF HERNIA OF THE VERMIFORM APPENDIX INTO AN OLD FEMORAL SAC.

BY THOMAS F. CHAVASSE, M.C. EDIN., F.R.C.S. EDIN. & ENG.,

SENIOR SURGEON TO THE BIRMINGHAM GENERAL HOSPITAL.

THE case here recorded resembles in many particulars those recently described by Mr. Edmund Owen and Mr. W. H. Battle.[1]

On May 8th, 1899, I saw in consultation with Mr. Arthur Jackson of Smethwick, Birmingham, a patient, aged 65 years, a widow, and the mother of 10 children, who for some years had suffered from a small umbilical hernia for which a suitable belt and pad were worn with advantage. She was also afflicted with rheumatoid arthritis of the hip joint and she had noticed for some years that from time to time a substance made its appearance in the position of a femoral hernia on the right side which was most marked if any straining took place during the acts of micturition and defecation. During the first week in May she became aware that the lump was persistent, that it was larger than ever before, and also that it was hard; she therefore consulted Mr. Jackson, who sent her to bed and applied heat. As no appreciable change took place a consultation was held. On examination a fixed tumour was found to exist at the base of Scarpa's triangle, about three inches long, overlapping Poupart's ligament and tailing off towards the pubes. This was hard to the touch, irreducible and painless, with a suggestion of deep-seated fluctuation. There was no impulse on coughing and the skin was unaffected. The bowels acted regularly and freely. The diagnosis apparently lay between femoral adenitis and some inflamed omentum in an old femoral sac. As the patient was adverse to any exploratory operation an expectant line of treatment was adopted and under the influence of rest and heat the lump gradually lessened in size. On May 19th a second consultation was held. The tumour was then of about the size of a Tangerine orange, soft and fluctuant, but containing in its deeper parts a hard mass which felt like the unsoftened portion of a lymphatic gland. On our urging the necessity of operative interference consent was given. On the following day (May 20th), with the assistance of Mr. Arthur Jackson and Mr. Wilfrid Jackson, I made a longitudinal incision into the tumour which gave exit to about six drachms of a dark-coloured serous fluid and revealed an old femoral sac one-eighth of an inch thick containing a much-congested appendix, three inches in length and of the thickness of an ordinary forefinger, curled up with the free end to the right. At first sight this looked like a knuckle of small intestine. Its mesocolon lay to the outer side and a small mass of adherent omentum lay to the inner side. The appendix was removed in the ordinary manner up to the crural ring and the stump was pushed back into the peritoneal cavity. The omentum adherent to the inner side of the sac was dissected off, ligatured, and removed. The sac itself was then freed to its neck, ligatured, and cut away, and the skin incision was closed by sutures after the insertion of an iodoform gauze drain. No unfavourable symptoms followed the operation.

This case apparently bears out the contention of Mr. McAdam Eccles that the inflammation of the appendix in these instances often takes place after its prolapse into the hernial sac and that the strangulation is secondary, being caused by the acute inflammatory processes taking place in a confined space. In this patient the crural ring was apparently of about the normal size and the stump of the appendix readily slipped back into the abdominal cavity, showing that its neck was not nipped. Judging by the thickness of the sac and the adhesions of the omentum the hernia had probably been in existence for a long period in an irreducible form. Mr. Jackson states that three weeks before he was first consulted the patient, when assisting to nurse a sick relative, accidentally received a blow in the region of the cæcum and this possibly may have been a contributing factor to the prolapse of the appendix. When removed this organ, especially at its free end, was very œdematous and if it had been allowed to remain might eventually have become gangrenous from the effects of the inflammatory exudations. It contained no concretion or other foreign body. As in the cases of Mr. Edmund Owen and Mr. W. H. Battle this patient was a married woman advanced in years and my experience is quite in agreement with that of the former surgeon as to the rarity of this condition, this being the first case which I have ever met with either in my hospital practice or in my private practice.

Birmingham.

[1] THE LANCET, May 6th, 1899, pp. 1222, 1227.

NOTES ON A CASE OF ADDISON'S DISEASE TREATED WITH SUPRARENAL EXTRACT.

BY ARTHUR FOSTER, M.D., C.M. EDIN.

IN October, 1898, I was consulted by a robust woman, aged 38 years, a weaver by trade, for symptoms of well-marked Addison's disease. She had had three normal labours, the last at 23 years of age. Menstruation began at 14 years of age, and except with the interruptions of pregnancy continued to be perfectly regular up to the age of 28 years at which time she "caught cold" and since then had not had the slightest sign of it. The first symptoms of the disease developed in April, 1898, when she was compelled to give up her employment owing to a feeling of lassitude and debility. This continued to increase and was accompanied by discolouration of the skin, the first place for it to be noticed being the forehead, on which there were several dirty patches which the patient vainly endeavoured to wash off. Her family history was exceptionally good, both parents having lived to over 70 years of age. She had three sisters, all married and having large families, and all past a normal menopause. There was no history of any tuberculous or malignant disease to be found in any of the living or dead members of the family. On examination the only pain complained of was in the back over the region of the suprarenal glands. It had been present for four months. The pulse was small and it varied from 58 to 64. The heart's impulse was scarcely perceptible and the sounds were decidedly weak. The least exertion caused breathlessness and faintness and on this account the patient was unable to get out of bed. Her stomach was in fair condition, though she had recently had several attacks of vomiting—an unusual occurrence for her. The anterior third of the tongue was pigmented and she had a perfect set of teeth. The pigmentation affected the whole body more or less and was especially well marked on the forehead, neck, arms, and round the nipples The amount and specific gravity of the urine were normal and there was no albumin. On vaginal examination the uterus was felt to be atrophied and the ovaries could not be palpated. The mammæ were small for a woman of her age and build. She was at once given five-grain tabloids of suprarenal gland substance, taking four a day. At the end of a month the pain in the back had disappeared, the pulse averaged 68, and she was able to sit up for several hours without discomfort. During November she contracted influenza and again became confined to bed. However, in December she recruited, and though she had lost flesh she felt better than she had at any time since she began to take the tabloids. The faintness almost disappeared and the pulse now averaged 80. She was still taking four or five tabloids a day. A greater quantity produced nausea. At the end of February, 1899, she had an attack of diarrhœa and vomiting accompanied by several severe faints and she again became confined to bed. She continued losing ground until March 15th, when convulsions set in and becoming comatose she died 24 hours later. No post-mortem examination was obtainable.

The points of interest which spring from the case appear to me to be the following. 1. The question whether the early cessation of the ovarian function and that of the suprarenal glands have a common cause. I do not know of any relationship having been shown to take place between the capsules on the one hand and the ovaries on the other; the point is, however, worth keeping in mind. 2. The rare termination of Addison's disease in epileptic fits. 3. The effect of suprarenal gland treatment. The patient certainly

got some relief from it. The pain in the back disappeared and the pulse was quickened. She always expressed herself as feeling better after taking the tabloids; she said that she felt more faint when she missed a day. She took them up to a fortnight before her death. The pigmentation did not appear to be influenced in any way by them.

Blackburn.

NOTES ON A CASE OF "LUPUS LYMPHATICUS" OF THE EYEBALL.

BY DAVID WALSH, M.D. EDIN.,
PHYSICIAN TO THE WESTERN SKIN HOSPITAL, LONDON.
AND
SYDNEY STEPHENSON, M.B., F.R.C.S. EDIN.,
OPHTHALMIC SURGEON TO THE EVELINA HOSPITAL AND THE NORTH-EASTERN HOSPITAL FOR CHILDREN.

THE following case is one of such rarity as perhaps to warrant a short account in the pages of THE LANCET. So far as we can ascertain few similar cases have hitherto been recorded in this country. Fortunately there can be no doubt as to the diagnosis, for the patient was shown at the Dermatological Society of Great Britain and Ireland on June 29th, 1898. The diagnosis was there confirmed by the President (Dr. Radcliffe Crocker) and other members present. Dr. Crocker agreed that the case came within the same category as those called by Mr. Hutchinson "lupus lymphaticus" but which he himself called "lymphangiectodes" or "lymphangioma circumscriptum." The case is briefly as follows.

A single woman, aged 18 years, who was seen by both of us in May, 1898, complained of a disfiguring condition of the right eyeball and lids which had existed since infancy but which had not got worse. The patient's general health was good and she was well nourished. No family history was available. As regards the right eye, externally there was apparent lengthening of the eyebrow, and the eyeball was prominent. The palpebral fissure measured 38 millimetres, as against 26 millimetres in the left eye. The lids were swollen and thickened but could be distinctly pitted on moderately firm pressure. The intermarginal space was twice as broad as was that of the other eye. The cornea was small, the globe was of less size than was that of the sound eye, and there was an external strabismus of 25°. The ocular conjunctiva showed a nævoid and vesicular condition as we have described later in detail in this note. The vision of the left eye equalled $\frac{5}{6}$ (Jaeger). With the right eye the patient could make out the number of fingers held up against a strong light at a distance of one metre. The disc of the right eye was ill-defined, the retinal vessels were large and rather tortuous. Both eyes showed dotted opacities in the lens, less marked in the left eye. Several strands of persistent pupillary membrane were present in the right eye, which presented an external nævoid condition. There were an enlarged caruncle and an enlarged semilunar fold which had a pale œdematous look. The fold was merged above and below in thickened conjunctiva and externally it was continuous with a translucent and vascular growth on the ocular conjunctiva. This growth consisted of a number of jelly-like elevations, arranged roughly in the shape of a ring round the cornea, leaving a clear space of about one-eighth of an inch at the corneal margin except at its upper segment where the growth impinged on the cornea. These yellowish translucent elevations had numerous punctate hæmorrhagic injections and fine blood-vessels. In places the jelly-like bodies were about one-eighth of an inch in thickness and were pouch-like. The patient stated that the eyelid got black at times and that there used to be a lump sometimes at the inner angle of the orbit. The capillaries on the cheeks were dilated.

The chief interest of this condition lies in its exact resemblance to Mr. Jonathan Hutchinson's "lupus lymphaticus." The jelly-like pouches on the eyeball were clearly varicose lymphatics. It seems possible from the history and from the dilated surface capillaries and congested retinal vessels that the eyelids and orbital contents generally may be affected with a mixed vascular and lymphatic nævus. In that case it is interesting to note the differing appearances of what we must assume to be a common underlying pathological condition. The elephantiasis of the eyelid and the nævus lymphaticus of the eyeball, if this view of common origin be accepted, are possibly two distinct expressions of some congenital local affection of angio-lymphatic type. The present lesion is congenital, non-infective, chronic, and associated with congenital nævoid manifestations. Mr. Hutchinson figures a patch at the back of the tongue in a young girl and remarks that the aspect of the mucous membrane exactly resembles that of the skin. The present case does not exactly tally with Mr. Hutchinson's lupus lymphaticus inasmuch as it is apparently non-infective and is not associated with attacks of erysipelatous swelling.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

LONDON HOSPITAL.

A CASE OF ADDISON'S DISEASE IN WHICH THE BLOOD-PRESSURE WAS TAKEN TWO DAYS BEFORE DEATH.

(Under the care of Dr. CHARLEWOOD TURNER.)

THE great value of Hill and Barnard's sphygmometer is that by its use a numerical value can be given to the arterial tension in any case, and it is thus much easier to compare the tension with that in other cases or with the tension in the same case at another time. The great reduction from 120 to 73 mm. of mercury is very striking. As to the value of suprarenal feeding in Addison's disease a certain number of patients receive much benefit, others for a time improve, while in most of the cases hardly any improvement follows. Sydney Ringer and A. G. Phear have collected the cases in which this treatment was followed.[1] For the notes of the case we are indebted to Mr. Reginald Wilson and Mr. Harold L. Barnard.

A man, aged 53 years, was admitted to the London Hospital complaining of extreme weakness without wasting. For two years he had been suffering from progressive loss of strength, but he had kept at his work until a fortnight before admission, when he was compelled to give in and take to his bed. In addition to the extreme debility and the irresistible desire to lie down he complained of frontal headache and vertigo associated with nausea and vomiting on several occasions and loss of appetite. His head would swim at times so that he had to grasp some support to prevent his falling and he always felt drowsy although he did not sleep well at night. He was quite clear that he had not lost flesh at all nor had he suffered from actual syncope. For three weeks he had been constipated and had a burning pain about the anus upon defecation the result of a fissure of recent origin. He had also had difficulty in micturition for the last few months and had to get up four or five times each night to micturate; the quantity of urine was subnormal, the specific gravity being low. There was no urethral trouble.

As he lay in bed the patient seemed to be in fair condition; his eyes were bright and his face was not wasted. There was no anæmia of the mucous membranes. His muscles were well developed and fairly firm, but very feeble in their action. His grip was weak. His skin was perhaps a little brown and this was rather more marked over his left elbow, but there was no excessive pigmentation at points of pressure. On examining his mouth, however, small spots of brownish pigment were seen all over the palate and the mucous membrane of the cheeks was affected with an almost black staining, while that of the lips was of a bluish-black colour. The area of cardiac dulness was diminished and the heart's impulse was scarcely perceptible, whilst the heart

1 Transactions of the Clinical Society of London, vol. xxix., p. 68.

sounds were nearly inaudible. The radial pulse was regular and beat 80 times a minute, but it was very easily compressible and its impulse was exceedingly weak. The examination of the lungs, abdomen, and nervous system revealed nothing abnormal nor was there any evidence of the presence of a new growth. The urine contained no melanin and the fundi were normal.

The treatment consisted of laxatives and hypnotics until three days before his decease, when the glycerine extract of one sheep's suprarenal was administered. The vascular condition was not appreciably improved and the patient was very sick. Frequently repeated injections of small quantities of strychnine and ergotin with morphia were then tried without any permanent beneficial result and the patient sank very rapidly at the last. Two days before his decease the blood-pressure of the brachial artery was ascertained by the Hill and Barnard sphygmometer. It was found to be only 73 millimetres of mercury and the oscillations of the pulse were very feeble. (The blood-pressure of normal men at rest varies between 100 and 125 mm. Hg.)

Remarks by Mr. WILSON *and* Mr. BARNARD.—The above case is reported because we believe that it is the first in which the actual blood-pressure has been recorded in Addison's disease. It is a matter of regret that a wish expressed by the patient prevented the diagnosis being confirmed by necropsy, but there can be little doubt that this was a genuine case of Addison's disease, as the above abstract shows.

BRISTOL ROYAL INFIRMARY.

A CASE OF DIPHTHERIA IN WHICH DEATH RESULTED FROM A CLOT IN THE BASILAR ARTERY.

(Under the care of Dr. F. H. EDGEWORTH.)

THE slight attachment of the clot in the basilar artery in the case recorded below is very suggestive that the coagulum had formed elsewhere and had been brought to the basilar artery by the blood-stream and the chief interest in this very rare case is the situation in which the embolus had been arrested. If a clot be able to traverse a vertebral artery it is exceedingly unlikely to be stopped when attempting to enter one of the posterior cerebral arteries. The absence of a discoverable source for the embolus is not of itself of very great importance. Embolism in diphtheria is not very rare, but, as in other cases, the middle cerebral is the artery most commonly affected. The interference with the cerebral circulation which would result from blocking of the basilar artery is quite sufficient to cause death.

A boy, aged nine years, was admitted to the Bristol Royal Infirmary on August 7th, 1898, complaining of swelling of the right side of the neck, sore-throat, and pain on swallowing. The illness had begun four days previously. On examination it was found that the fauces were red and slightly swollen and that there was a patch of whitish-grey membrane on the right tonsil and right side of the uvula. The heart, lungs, and abdomen were normal; the urine contained a small quantity of albumin. The temperature was 100° F. The diagnosis of diphtheria was fairly obvious and this was subsequently confirmed by bacteriological investigation. 1000 units of diphtheria antitoxin were immediately injected and 5000 more units were injected in the course of the next four days. The patch of membrane gradually cleared off, no other parts of the throat became affected, and the patient appeared to be going on well though the temperature remained high, being between 100° and 101°. On the 12th (five days after admission) a slight patch of consolidation was discovered at the apex of the upper lobe of the right lung. This persisted until death. On the 16th (nine days after admission) a slight nasal twang in the voice was apparent, though fluids did not regurgitate, and on inspection there was no obvious paralysis of the palate. On the 20th, however, paralysis of the right side of the palate was well marked both as regarded movement and sensation, the left side of the palate remaining intact. Two days later there was some impairment of the left side also. The knee-jerks were still present. But for this paralysis the patient seemed to be better though the urine still contained a little albumin and the patch of consolidated lung had not cleared up. The boy took his food well, fluids did not regurgitate through the nose, and the action of the heart was well maintained. From that time onward the patient did not seem to be so well; there were no fresh symptoms or physical signs, nothing that one could definitely point to, and yet it was easy to see that the boy was worse. On the 27th (20 days after admission) the patient at 12.30 P.M. vomited his dinner which he had taken half an hour previously. Some of the food came through the nose and some entered the larynx and caused a good deal of coughing and choking. After this he was somewhat collapsed, lying with his legs doubled up and whining and crying. At 8 P.M. he suddenly passed into a state of opisthotonos which became so marked that at 9 P.M. there was a distance of only nine inches between the occiput and the sacrum. The limbs were extended, the hands were clenched, and all the muscles except those of the face were in a state of continuous tonic spasm with occasional slight twitching. All the reflexes were exaggerated. This condition of tonic spasm gradually lessened though it did not altogether pass off. The temperature gradually rose and at 1 A.M. next morning death ensued, apparently from failure of the heart, the temperature being 106°.

Necropsy.—At the post-mortem examination the apex of the upper lobe of the right lung was found to be collapsed, but the lungs were otherwise normal. The heart was normal; there was no endocarditis and there was not the slightest trace of ante-mortem clotting in the cavities (including the left auricular appendix) of the heart. The abdominal viscera were normal. On examining the brain a clot was found in the upper half-inch of the basilar artery, projecting at its upper end into the openings of the posterior cerebral arteries. The clot was firm, slightly decolourised, and not adherent to the vessel wall which was normal. Behind this clot was a little soft red post-mortem clot. No other lesion was discovered in the brain or in its blood-vessels.

Remarks by Dr. EDGEWORTH.—This curious case is difficult to explain. At first it seemed to be an ordinary one of diphtheria. The antitoxin treatment had a good influence on the membrane which did not extend and rapidly cleared off. The paralysis of the palate, though ultimately affecting both sides, began and was always most marked on the right side—i.e., that on which the membrane had been. This is not an uncommon feature and not difficult of explanation on the accepted view that the diphtheritic poison is produced at the infected area. The chief problem is the nature and causation of the terminal phenomena. The clot in the basilar artery might have been due to either thrombosis or embolism. The facts in favour of the latter theory are the character and position of the clot and the healthy state of the wall of the vessel. Thrombosis at such a site seems improbable seeing that no thrombosis was discovered in those parts of the cerebral arteries where the blood current is slower than in the basilar artery. On the other hand, no source of an embolus was found. Whatever the cause of the clot death was almost certainly due to its presence.

It is well known that convulsions may result, though infrequently, from an obstruction of the basilar artery, whilst rigidity or clonic spasm in the arms and legs is much less common than in hæmorrhage into the pons. The characteristic of this case was that the spasm was tonic and involved all the muscles except those of the face, so that opisthotonos and extension of the limbs resulted. Such tonic spasm from obstruction of the basilar artery seems quite exceptional. Embolism of the basilar artery as a sequel of diphtheria has not hitherto been recorded. Many cases of cerebral hemiplegia following diphtheria are to be found in medical journals[1] and have been attributed to embolism, thrombosis, or hæmorrhage; but as the majority have recovered the diagnosis has mostly been a matter of inference only. Apparently the only case in which embolism of a cerebral artery following diphtheria has been found at a necropsy is that recorded by Gee and Abercrombie[2] in which, on the sixteenth day after the onset of diphtheria, left hemiplegia suddenly occurred; death took place 11 days afterwards from paralysis of the intercostal muscles. The post-mortem examination disclosed an embolus in the right middle cerebral artery, infarctions of the spleen and kidney, and slight thickening of the edge of the mitral valve, but no clot in the heart. It is, perhaps, worthy of remark that in those cases of right hemiplegia and aphasia immediately following diphtheria which had been attributed to embolism (but in which death did not occur) no cardiac murmur was discovered. It can therefore be a conjecture only that such cases and also the one recorded above are due to clotting of blood in the left side of the heart, possibly in the appendix of the left auricle.

[1] 30 such cases are collected by Thomas: American Journal of the Medical Sciences, 1896, vol. cxi., p. 384.

[2] Medical Times and Gazette, 1882, vol. ii., p. 378.

Medical Societies.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.—An ordinary meeting of this society was held at 20, Hanover-square, W., on June 1st, the President, Dr. R. Fortescue Fox (Strathpeffer Spa), being in the chair.—Mr. H. Shirley Jones read a paper on the Treatment of Neuritis and Neuralgia by the Droitwich Brine Baths. He said he considered obstinate neuralgia and neuritis for the most part associated with, and dependent upon, a debilitated condition and believed gouty neuralgia to be more the result of weakness than the effect of any uric acid on the nerve itself. The nerve most affected was the sciatic for obvious reasons, for it was the most difficult nerve to rest and the large surface over which it extended rendered it more prone to injury from cold, &c. Next in frequency was, perhaps, the fifth. Obstinate cases of neuralgia were met with accompanying malignant diseases. He had seen also three cases of sciatica following the apparently successful removal of mammary carcinoma which would only admit of very temporary relief; each patient died within two years of onset without any material benefit or any evidence of return of malignant disease. He related three cases of intense neuritis leading to insanity.—Dr. Douglas Kerr (Bath) said he could testify to the benefit which he had known in severe cases of neuralgia from the Droitwich bath treatment. He asked Mr. Shirley Jones for particulars of treatment.—The President remarked that neuralgia in its various forms was usually relieved under balneological treatment. It acted doubtless as an eliminant and also tended to remove the sub-inflammatory conditions on which most cases of neuralgia depended. He also called attention to the use of cold douches for neuralgia by the French.—Mr. Bowen Davies (Llandrindod Wells) asked for further particulars of the methods of treatment at Droitwich.—Mr. Shirley Jones, in reply, said that he had chosen that subject as being of interest because he thought that more brilliant results were obtained from these waters in cases of neuralgia and neuritis than in any other disease. The cases of neuritis which he had mentioned showed a peculiar obstinacy and each led to a very unusual complication—viz., insanity. The treatment he adopted at Droitwich in neuralgia and neuritis consisted for the most part for acute cases in the use of a hot reclining bath without massage or electricity but with as complete rest as possible, in cases of the lower limb rest in the recumbent position, for the upper limb rest in a sling, and in uncomplicated cases no drugs at all. For the relief of pain he used hot brine as a compress. As the acute stages passed off the douche over the course of the nerve came into use; the temperature and the length of time varied considerably with the amount of pain and the idiosyncrasies of the patient, the temperature of the douche being from 115° to 80° F. usually, and he had occasionally found great benefit from a temperature as low as 65° given as a douche, particularly in cases where there had been atrophy of muscles resulting from a neuritis; there, too, he found great benefit from the use of the swimming-bath, where, owing to the great buoyancy of the water, exercise of any limb might be effected with a minimum of exertion, and this he thought a very important point in the development of atrophied muscles; apart from that the swimming-bath had a very decided tonic effect and as such was very useful in the treatment of chronic neuralgia.—A paper written by Dr. Ivor Murray was then read on Scarborough as a Health Resort in Phthisis.

ISLINGTON MEDICAL SOCIETY.—A meeting of this society was held at 25, Highbury-place on May 16th.—Mr. Arbuthnot Lane read a paper on the Pathology and Treatment of Adenoids. He pointed out that the term "adenoids" was applied to an enlargement of the lymphatic tissue described in anatomical works as the pharyngeal tonsil and that from its proximity to the posterior nares and Eustachian tubes it readily interfered with their functions, and the operation for its removal was devised with the object of freeing these apertures. Years had now elapsed since he had recognised that the hypertrophy of the pharyngeal tonsil was simply an inflammation of a lymphatic tissue consequent upon an infection of an area the lymphatics of which drain into it and that the removal of the secondary infection dealt only with an effect and not with the primary source of trouble. He also recognised that the naso-pharyngeal sequence was but an accidental consequence of a general condition which occurred in children possessed of little vitality resulting from an imperfect respiratory capacity in the first instance. On this ground he attacked the primary infection of the naso-pharynx, expecting that its disappearance would in time be followed by a return to their normal condition of the pharyngeal, faucial, and cervical lymphatic glands, as well as by a normal development of the naso-pharynx, which was always imperfectly developed in chronic cases because the forced draught of respired air through the cavity had been in abeyance. He effected this by improving the vital capacity by regular respiratory exercises, all inspired and expired air being driven through the nasal cavities, the mouth being kept closed. This treatment met with complete success, so that he found himself now but rarely called on to operate for adenoids. He called attention to the fact that the same class of children constantly assumed the several attitudes of rest—namely, the symmetrical and asymmetrical resting postures of the trunk and abduction of the foot—conditions which, when they become fixed or exaggerated, are called by the names "dorsal excurvation" or "round shoulders," "lateral curvature" or "scoliosis" and "flat-foot," all of which terms he hoped would soon disappear from surgery. He described and showed photographs which illustrated the several changes in the trunk which were consequent on respiratory incapacity and the various deficiencies in development of all the bones of the face which he found were directly dependent for their perfect form on the proper evolution of the naso-pharynx under the influence of the forcible passage of air through this cavity in respiration.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—A clinical meeting of this society was held in the society's rooms at the West London Hospital on June 2nd, Dr. S. D. Clippingdale, President, being in the chair.—Mr. McAdam Eccles showed a boy with a large Nævo-lipomatous Tumour of the Forearm which had existed since birth. The case was discussed by the President, Dr. Leonard Dobson, Mr. Rotheroe, Dr. E. P. Paton, Mr. C. B. Keetley, and Mr. Neville Wood.—Dr. Leonard Dobson and Mr. C. B. Keetley showed a young woman who had been successfully operated on for Gastric Ulcer three weeks previously. The patient had suffered much pain for many months and was in no way better in spite of prolonged medical treatment. Mr. Keetley opened the abdomen and found near the œsophagus an ulcer which had become adherent to the diaphragm. The adhesions were separated and the ulcer was scraped and closed. The patient made a good recovery.—The case was discussed by Mr. Bidwell, Mr. Neville Wood, and Dr. Paton.—Mr. Bidwell showed (1) a child on whom he had operated for Tuberculous Peritonitis; and (2) a man on whom he had operated for Extensive Carcinoma of the Rectum.—These cases were discussed by Dr. Dobson.

Reviews and Notices of Books.

A System of Medicine. By Many Writers. Edited by THOMAS CLIFFORD ALLBUTT, M.A., M.D. Cantab., LL.D. Glasg., F.R.C.P. Lond., F.R.S., Regius Professor of Physic in the University of Cambridge. Vol. VI. London: Macmillan and Co. 1899. Illustrated. Pp. 944. Price 25*s.* net.

THE medical profession will welcome the appearance of the sixth volume of Professor Clifford Allbutt's System of Medicine. The preceding volumes have contained such excellent articles that the completion of the series is naturally anxiously looked for. The present volume is in every way equal to its predecessors. It contains articles on the circulatory system, diseases of muscles, and diseases of the nervous system.

The first article is by Dr. G. Newton Pitt on Right-sided Valvular Diseases. Cases of this kind are comparatively uncommon and Dr. Pitt had a difficult task to accomplish in considering them. He has succeeded, however, in producing a most interesting and full account of the affections which may attack the valves of the right auricle

and ventricle, and most readers will probably be surprised that such a varied number have been recorded. He first writes on "Pulmonary Incompetence," remarking that this is the rarest of the valvular lesions of the heart, only 17 cases having been noted in the post-mortem room at Guy's Hospital out of 11,000 examinations during a period of 23 years. The total number of cases confirmed by necropsy which Dr. Pitt has been able to collect is 99, besides some 30 cases which were not verified after death. The most common pathological condition met with was infective endocarditis, this being present in 57 of the cases.

The subject of Pulmonary Stenosis is merely mentioned, as it is almost invariably congenital in origin and was fully described in vol. v., p. 703.

Diseases of the Tricuspid Valves are described under five headings—(1) in which acute vegetations were found upon the valves; (2) the valvular cusps were thickened; (3) the cusps were affected with fungating endocarditis; (4) the cusps were incompetent; and (5) the tricuspid orifice was stenosed. This forms a convenient and practical classification. The "safety-valve action" of the tricuspid valve is duly commented on; it is of great importance in relieving the strain upon the heart on occasions of sudden exertion.

The article on Angina Pectoris by Sir R. Douglas Powell is written in the usual lucid style of that authority, showing much originality of thought and a thorough knowledge of his subject in all its details—in fact, we may borrow a sentence which he uses in describing Heberden's work and say that "his description is a model of accuracy and lucid expression." Sir R. Douglas Powell divides cases of angina pectoris into three groups: (1) those cases in which the disease is a pure neurosis of the cardio-vascular system, a disturbance of the innervation of the systemic or pulmonary vessels, including sometimes the vessels of the heart itself, causing their spasmodic contraction and thus increasing the peripheral resistance to circulation; (2) another and graver class of cases in which there is the same mechanism of disturbed cardio-vascular innervation, but associated with it a diseased heart; and (3) a group of cases in which the heart itself is the primary seat of the painful and often fatal symptoms—these include those cases dependent on coronary narrowing. The first group the author designates "angina pectoris vasomotoria," the second "angina pectoris gravior or secondary cardiac angina," and the third "primary cardiac angina." This classification is much to be preferred to the one commonly adopted—namely, "true angina pectoris" and "pseudo-angina pectoris," the last-named term being both unsuitable and unsound in its signification. The illustrative cases are well chosen and enable the reader more fully to understand the symptoms characteristic of each form.

Dr. F. T. Roberts writes on Diseases of the Mediastinum and Thymus Gland. We have already referred to the remarks on mediastinitis in a leading article on Chronic Mediastinitis which appeared in our columns on April 29th. The section on Intra-thoracic New Growths is particularly interesting and the author has succeeded in compiling an admirable review of the subject which, added to his own experience, makes the article a valuable one. The clinical aspect of the subject is fully described in terms which leave no room for doubt as to the writer's meaning, especially so in relation to diagnosis.

Under the heading Diseases of Blood-vessels and Lymphatics are several contributions: Thrombosis and Embolism, by Professor Welch; Phlebitis, by Mr. H. H. Clutton; Arterial Degenerations and Diseases, by Dr. F. W. Mott; Aneurysm of the Aorta, by Professor Sir W. T. Gairdner; and Aneurysms of Arteries in the Abdomen, by Dr. Rolleston; the last named also contributes a paper on Diseases of the Lymphatic Vessels.

One of the best articles in this volume is that on Aortic Aneurysm by Sir W. T. Gairdner. It is characterised by a masterly knowledge of the subject and a manner of expressing his ideas which at once rivets the attention of the reader. In speaking of the mechanical origin of aneurysms of the aorta the author points out that we have to deal with an exceedingly complicated problem and that while it is in a high degree reasonable to affirm that both continuous effort and sudden or violent strain or injury are in a very appreciable degree causes of aneurysm, the question of how far and at what stage in a particular case these causes have come into operation is often one of the utmost difficulty and complexity. The symptomatic diagnosis is elaborately set forth and the actual value of certain symptoms are considered at length, these being pain, cardiac collapse, syncope, palpitation, cough, dyspnœa, laryngeal phenomena, hæmorrhage, and dysphagia. Space will not permit us to comment further on this most valuable contribution, but both author and editor may be congratulated on its appearance.

Under the section of Diseases of Muscles are four papers, one on Myositis, by Dr. Batten; one on Myotonia Congenita (Thomsen's disease), by Dr. Hale White; one on Idiopathic Muscular Atrophy and Hypertrophy, by Dr. C. E. Beevor; and the last on Facial Hemiatrophy and Hemihypertrophy, by Dr. Aldren Turner.

Diseases of the Nervous System are then commenced, the first article being by Mr. Bevan Lewis on General Pathology of the Nervous System. Our knowledge on this subject has so much increased during recent years that Mr. Lewis had a hard task before him to select and describe the more important discoveries in the physiology and pathology of the nervous system. This chapter requires careful and close reading but contains a large amount of information. He begins by describing the "neuron," the modern conception of which "is that of a variously contoured protoplasmic centrum—the cell body enclosing a nucleus of relatively large size and a well-defined nucleolus." The "axon" and the "dendrons" are then defined and the various parts of the cell structure described in detail. This arrangement is necessary as the terms are more freely used in medical literature than they were but are not fully understood by the majority of readers. A general view is then taken of System Diseases, and we are told that "by this term we mean the exclusive implication of nerve tracts having a community of function of certain links in the chain of neurons which extend from the periphery to the brain cortex, or conversely." The expressions "higher level motor neurons," "motor neurons of the lower level," and "combined system diseases" are also briefly explained.

Another excellent article is by Professor Sherrington and Dr. Sharkey on Tremor, Tendon-Phenomenon, and Spasm, the former author being responsible for the physiological section and the latter for the clinical and pathological sections.

Next follow articles on Trophoneuroses: Neurotrophic Affections of Bones and Joints, by Dr. Turney; Neurotrophic Diseases of Soft Tissues, by Mr. J. Hopkins; Adiposis Dolorosa, by the Editor; Raynaud's Disease and Erythromelalgia, both by Dr. T. Barlow. Want of space prevents us from commenting on the above, but they form a most valuable series of articles for reference.

The next division is headed Diseases of the Nerves and contains the following articles: Diseases of the Spinal Nerves, by Dr. G. A. Gibson and Dr. R. A. Fleming; Multiple Symmetrical Peripheral Neuritis, by Dr. Judson Bury; Trigeminal Neuralgia, by Dr. Head; Diseases of the Cranial Nerves, by Dr. Aldren Turner; and Medical Ophthalmology, by Mr. Brudenell Carter. The contribution on Diseases of the Spinal Nerves reflects the greatest credit on the

authors, they having condensed an immense amount of work into a comparatively small space. The consideration of the subject (after a short introduction) is divided into two groups, one of a more general character containing the pathological and clinical features common to the different forms of disease, the other of a more special character.

The subjects which fall under the head of "general features" are neuritis, tumours, pressure, and wounds; whilst under the "special section" are described the individual affections of the different nerves. This division is a convenient one both for study and reference.

Under the title "Diseases of the Spine" are two contributions—Diseases of the Vertebral Column, Tumours, and Compression Palsies, by Mr. Victor Horsley, and Affections of the Spinal Meninges, by Dr. J. S. Risien Russell. Mr. Horsley's paper, as might be expected coming from an author who has made the subject one of particular study, is full of valuable information but is essentially practical, a quality which the majority of those who consult the "System" appreciate above everything else.

The last article in this volume, by Dr. Risien Russell, also shows that much pains have been taken in its production and that the author has had a practical acquaintance with the diseases which he describes. The main part of the paper is occupied by a consideration of the most important morbid conditions of the spinal meninges—(1) vascular disturbances, (2) inflammations, and (3) tumours of the meninges. Dr. Russell adds, however, "Besides these conditions there are certain morbid states which are only of interest from the pathologist's point of view and concern us but little as they give rise to no clinical manifestations by which they can be recognised or which call for treatment." These are very wisely disposed of in comparatively few words.

In conclusion, we must once more congratulate the editor, Professor Clifford Allbutt, on his choice of the authors and the manner in which they have fulfilled the duties entrusted to them.

Bad-Nauheim: Its Springs and Their Uses, &c. By J. GROEDEL, M.D., Bad-Nauheim. Friedberg and Bad-Nauheim: Bindernagel. 1899.

THAT a second and enlarged edition of Dr. Groedel's guide-book should be in demand within four years of the publication of the first edition shows that it has supplied a public need. The statistical record of the growth of Nauheim as a watering-place is an interesting study. For the 30 years from 1855 to 1885 there was an average influx of between 4000 and 5000 visitors annually. In 1890 the numbers had risen to over 8000, in 1895 to over 14,000, and in 1898 to over 19,000 persons. This later era of "leaps and bounds" in prosperity coincides with its wide advertisement as a resort for the treatment of chronic heart disease. The author, as one who has had a long experience of the use of the waters of Nauheim, is entitled to speak with authority on the subject. The volume before us is at once a guide to the springs and their uses and to the town and the surrounding country easily accessible to the visitor. To combine these objects satisfactorily is no easy task and one demanding considerable professional and general tact. To attempt it, moreover, is to undertake a considerable responsibility. Opinions must be well weighed and the limitations and dangers as well as the beneficial effects of the waters in question must be fairly set forth if a public ignorant of medicine and aware only of their sufferings are not to be misled or disappointed. We consider that Dr. Groedel has been very mindful of these difficulties and responsibilities and that he has acquitted himself of his task with much judgment and impartiality. The section to which our readers will chiefly turn is that dealing with "the diseases for which Bad-Nauheim is adapted and their treatment." We observe that while giving due prominence to the aqueous therapeutics of these maladies Dr. Groedel has not been unmindful of the general treatment of disease based upon the principles of physiology and pathology which remain the same whatever the geographical position of the patient. It is this circumstance which renders the physician himself not the least important factor in the efficacy of a given health-resort. The author states, however, with much truth, that excellent remedies applied at the homes of patients at times seem to require the additional sojourn at such a resting-place as Nauheim to exercise their full force. Nor is it surprising that this should be so. The influence of a pleasant and invigorating watering-place, far from the scene of the daily anxieties and the half-performed duties of one enfeebled in health, is a potent factor for good. To all such influence the author gives due weight and with respect to the direct effect of the waters and climate of his own town writes with a conviction of their utility under appropriate circumstances and also with a commendable caution. The work is written in English by the author himself and shows a good knowledge of our language. Some idiomatic errors occur which are of no great moment and may be corrected in a later edition. The book is well printed, is of a convenient size and affords useful information both to the professional and the lay reader.

The Thermal Waters of Bath. By GILBERT A. BANNATYNE, M.D. Glasg., M.R.C.P. Edin., Honorary Physician to the Royal Mineral Water Hospital, Bath, and to the Royal United Hospital, Bath. Bristol: John Wright and Co. London: Simpkin, Marshall, Hamilton, Kent, and Co., Limited. 1899. Pp. 87. Price 2*s*.

THIS little volume gives a good account of the thermal waters of Bath, the appliances for their use, and the diseases in which they are employed. One feature of the book at once strikes the reader—viz., the very moderate tone in which it is written—it is not merely a "puff" of the city in which the author practises. Bath is given its due meed of praise but no more. This is as it should be and it is more likely to redound to the credit of the baths than exaggerated commendation. The first chapter deals with the historical associations of the baths, with a brief consideration of the situation, the climate, and the general health statistics of Bath. The second chapter is devoted to the source and origin of the waters and a comparison with other springs. The author also gives some attention to the theory of the action of the waters and arrives at the conclusion that it is not to the presence of one or more particular mineral ingredients, except when they are found in large quantities, that the efficacy of any spring is due or because of which it is selected as a medicinal agent, but it is rather to the union of the several substances contained in the water and to its temperature that we may look for the benefit which the combined experience of those prescribing it and of those using it would teach us to expect. With this theory most spa physicians would probably agree. It is because the "combination" in which the various mineral and gaseous constituents exist in such waters is unknown that we are unable to successfully imitate them and bring Bath, Homburg, or Nauheim to London. In the third and fourth chapters will be found a clear and detailed description of the bathing establishments, stress being laid on the fact that they are open all the year round. In describing the Aix massage douche baths he takes the opportunity of giving a short dissertation on massage and its uses. In the chapter on the action of the baths in diseases in which the waters are of use the author again exhibits the thorough scientific knowledge which he possesses of hydro-therapeutics. With regard to the diseases most satisfactorily treated by a course of the baths, gout and rheumatism of the

joints stand first, rheumatoid arthritis not yielding such a high percentage of "cured" or "relieved," but still presenting good hopes of relief to those sufferers who have tried other methods in vain. The treatment of sciatica and lumbago gives a percentage of 92·8 "cured" or "relieved." We do not understand, however, why these two conditions should be bracketed together, for "lumbago" is usually regarded as a form of "muscular rheumatism" and not as a nervous affection.

The work is evidently intended for the use of practitioners and not as a "guide book" and we can cordially recommend its perusal to our readers.

LIBRARY TABLE.

Annual and Analytical Cyclopædia of Practical Medicine. By CHARLES E. DE M. SAJOUS, M.D., and 100 Associate Editors. Vol. III. Pp. 600. Illustrated with chromolithographs, Engravings, and Maps. Philadelphia, New York, and Chicago: The F. A. Davis Company. 1899.—We have already commented on the general objects and scope of this work in our reviews of the previous volumes. The present volume commences with an article on Dislocations, and terminates with one on Infantile Myxœdema, better known in this country under the term "cretinism." All the papers are well written and are of such length as to enable the authors to give a fair amount of space to their subjects. In certain instances, however, as when the pathogenesis is obscure or recent investigations have rendered more space desirable, writers have been allowed such latitude that their articles form valuable monographs. Amongst such more extended contributions are the following: the article already mentioned on Infantile Myxœdema, by Professor Osler and Dr. Norton of Baltimore; Exophthalmic Goitre, by Professor Putnam of Boston; and Goitre, by Professor Adami of Montreal. From the numerous subjects appearing in this volume it is a little difficult to select any for special notice. To the surgeon the following will be of interest. Dislocations and Fractures, by Professor Stimson and Dr. Keyes, jun., of New York; Hip-joint Disease, by Dr. Reginald H. Sayre of New York; and Hernia, by Dr. W. B. Coley of New York; whilst the attention of physicians will be more attracted by the papers on Dysentery, by Dr. Flexner of Baltimore; on Gout, by Dr. Levison of Copenhagen; on Eczema, by Professor Stelwagon of Philadelphia; on Hysteria and Hypnotism, by Professor Eskridge of Denver; and on Fatty Degeneration of the Heart, by Dr. J. M. Anders of Philadelphia. The contributions have all been well brought up to date, the literature of 1896-98 being freely referred to.

The Medical Annual and Practitioner's Index: Work of Reference for Medical Practitioners. Seventeenth year. Bristol: John Wright and Co. 8vo. Pp. 734. Price 7*s.* 6*d.* net.—For 17 years this useful annual has appeared, and although the first volumes were good the later volumes have been even better, so that at present the book can be accepted as a trustworthy record of the advances made in medicine, surgery, and gynæcology during the past year. Every year it must become increasingly difficult to compress into a reasonable compass the vast amount of fresh information which accumulates unceasingly. The work deals with advances not only in treatment, though this has most space allotted to it, but also in etiology and diagnosis, and the names of the contributors guarantee the trustworthiness of the information supplied, and as the sources are quoted the reader knows where to refer should he need further information. Numerous illustrations, both plain and coloured, assist the text and the printing and paper are all that could be desired. The series of plates illustrative of those bacteria which are pathogenic in the human subject which was commenced in the volume for 1898 is completed in the present volume; it has been prepared by Mr. S. G. Shattock and is excellent. This work should prove of especial benefit to those who are in general practice, for it gives them the most recent information and it will often provide a suggestion for treatment at the very moment when it is needed. There are useful appendices on recent legal decisions affecting medical men, on new medical appliances, and lists of new books and of asylums and inebriate homes. There is also an index to life insurance offices and in each case is given the amount of premium for insuring £100 at 30, 40, and 50 years of age.

The Hygiene of the Mouth. By R. DENISON PEDLEY. London: J. P. Segg and Co Philadelphia, U.S.A.: S.S.W. Dental Manufacturing Co. Pp. 93. Illustrated. Price 2*s.* 6*d.*—The object of this little volume is to show how dental disease may be controlled and in a large measure prevented. It is somewhat difficult to discover for what class of readers the book is intended. Some portions are well worthy the attention of those specially engaged in medical work, while in many portions the elementary character of the information would serve to indicate that the book is intended for the lay reader. Still, anyone not actually engaged in dental practice will gather much useful information from the little work and if it only helps to teach in a small way the importance of maintaining the mouth in a healthy condition it will not have been written in vain. We may say that in the "get up" of the book there is room for considerable improvement.

JOURNALS.

Annales de Gynécologie et d'Obstétrique. May, 1899. Paris: G. Steinheil.—This number contains the following original articles: the Treatment of Uterine Cancer by Total Abdominal Hysterectomy, by MM. L. Picqué and P. Mauclaire; the Vascular Ligaments of the Uterus, by M. Pierre Fredet; and the Employment of Steam in Gynæcology and Obstetrics, by Dr. R. Labusquière. A review is given of the thesis by Dr. Ch. Lefèvre, on a Common Form of Sterility in the Female. An account of the proceedings of various gynæcological and obstetrical societies and the usual bibliography conclude the number.

New Inventions.

AN ADJUSTABLE READING-DESK.

THIS desk consists of a board measuring 11 inches by 13 inches provided with three props or supports which enable it to stand securely in a sloping position at any angle that may be desired by the reader. The attachments of these supports occupy one side of the board and on the other side there is a T-shaped book-holder pivoted on a short brass rod passing through the centre of the board. The book-holder can be turned in any direction round this pivot and can be clamped at any point so that the book may be either in the usual upright position or may be placed so as to be conveniently read by a person lying on his side, in which case it is fixed to the book-holder by two cords passing inside the covers and the pages are held open by brass hooks. The desk has in fact been designed for use by students, invalids, and others who are desirous of reading when lying on the side in bed or elsewhere. It is no less useful for readers seated at a table in the ordinary way, as the book is conveniently supported and held open. Provisional protection has been taken out for the desk, and it may be obtained from Mr. E. H. B. Hughes, Rowlands Hey, Sea Bank-road, Liscard, Cheshire.

THE LANCET.

LONDON: SATURDAY, JUNE 10, 1899.

THE celebration of the centenary of the Royal Institution is an interesting historic as well as scientific event. During the period of its existence the achievements and progress of science have been unprecedented. It would not be correct to say that the whole fruits of scientific research in this country have been due to the work done in the Royal Institution, but there can be little doubt of the great good and influence which the foundation of the Institution has exerted upon educational progress. Whatever may have been the primary objects of the foundation of the Institution, it has since fulfilled a most worthy and admirable function in serving as a means of promulgating exact knowledge amongst the people. It has served, in short, as a connecting link between the people and the profound scientific thinker and investigator. Nor has this position been reached at the sacrifice of the best traditions and aims of the Institution, for although at one time it threatened to become the mere playground of science the demonstrations held within its walls have stirred up in some who deemed it fashionable to attend the lectures in its early days a spirit either to go on with the work of unravelling Nature's mysteries or else to assist materially the funds of the Institution so that others might be enabled to carry on that work which plays no unimportant part in the welfare of the nation. Where else can the people go who are interested in seeing and understanding the recent developments of scientific research and who have a natural yearning to comprehend its import and to be in a position to speculate upon the probable application of discoveries to commerce, to hygiene, and even it may be to the preservation of peace? Of those, for example, who attended the lectures of that brilliant investigator and exponent, MICHAEL FARADAY, it is probable that many foresaw how important the application of his delightfully simple and lucid experiments and demonstrations was likely to be in the affairs of the civilised world. For in those experiments were the elements of modern lighting by electricity and of human communication by telephony and by telegraphy. Many will remember the apparently simple experiment which has since proved so momentous—the revolution of a metal disc opposite the poles of a magnet giving rise to an electric current. The same experiment has been a million times repeated on a practical scale and to-day it finds illustration in the powerful dynamo upon which we depend at present as the best source of energy for the production of the electric light. For 50 years FARADAY laboured within the walls of the Royal Institution and his labours are a tribute to its founders and a monument to his genius.

The Royal Institution was founded by Sir BENJAMIN THOMPSON, better known as Count RUMFORD, in 1799, himself a prolific contributor to our knowledge of physical laws. Count RUMFORD, however, was not long at the Royal Institution and at the time when he left the revenue was so low as to threaten an untimely end to the foundation. Odd as it may appear, the Institution was saved by people of a purely business instinct, whose avowed object was to "run" the Institution on somewhat commercial lines and to bring scientific experiments to the fore as a fashionable sort of thing to talk about. This may have been a derogatory procedure from the point of view of pure science, but it succeeded in preserving the Royal Institution for uses that proved far from base. It was at about this critical juncture in the history of the Royal Institution that Sir HUMPHRY DAVY commenced his duties as a professor there, with what result is well known. Young DAVY was a surgeon's assistant, but his bent was towards chemistry and physics, on which subjects he proved himself an able investigator during his engagement at the Pneumatic Institution at Bristol which he joined soon after its foundation. It was here that he discovered the anæsthetic properties of nitrous oxide, but his most memorable work was done in the Royal Institution where he isolated the metals of the alkalies and alkaline earths by the galvanic current. Sir HUMPHRY DAVY did probably more than any of his contemporaries to awaken the public interest in the application of chemistry to technical industries and daily life. It is pleasing to record that the nobility and poetry of Sir HUMPHRY DAVY'S nature are shown in his writings and in his beautiful relations with FARADAY who succeeded him. The work of FARADAY has since been carried on by men who are happily amongst us at the present day. It was in the Royal Institution, for example, that Sir EDWARD FRANKLAND carried on that classic research on organometallic compounds which led to the theory of types and which has since proved a solid basis for that huge superstructure now known as organic chemistry. Distinguished chemists like Dr. ODLING and Dr. GLADSTONE also occupied the same professorship until in 1877 the present holder of the chair, Professor DEWAR, was appointed. The chair is known as the Fullerian Professorship and was founded by JOHN FULLER in 1833. This was the first substantial endowment to the Royal Institution, the sum of £10,000 being disbursed in maintaining a chair of chemistry and physiology and the balance used as a reserve fund.

Professor DEWAR'S splendid researches and results in the liquefaction of gases are well known and are of historic interest since this work was really commenced by FARADAY. With what admiration would FARADAY have witnessed the liquefaction of air, fluorine, helion, argon, and hydrogen; and how profoundly impressed he would have been with the triumph, coming as a sequel of the researches which he had begun, the conversion of all known gases under the combined influence of high pressure and low temperature to the state of liquid and incidentally in some cases of solid. Of the distinguished physicists who successfully devoted much of their time to research at the Institution must be mentioned that arch-experimentalist and exponent JOHN TYNDALL. He was succeeded by Lord RAYLEIGH, an able mathematician whose name has become recently familiar to the world by his observation of the

abnormality shown in the density of the nitrogen of the air—an observation which, with the assistance of Professor RAMSAY, led to the recognition and isolation of a new element, argon. This discovery marked an epoch in the history of both chemistry and astronomy. It has opened up an enormously wide field for conjecture and research and has already been prolific in yielding fruitful results. The last event of importance in the just closed century's history of the Royal Institution is the munificent bequest made by Mr. LUDWIG MOND in 1896 which provides for a permanently endowed DAVY-FARADAY Research Laboratory which is thoroughly equipped for the prosecution of research by all qualified workers who choose to apply. The actual centenary date of the founding of the Royal Institution was last Monday, June 5th, on which occasion the PRINCE OF WALES presided over a banquet held at the Merchant Taylors' Hall and during the week commemoration lectures were delivered by Lord RAYLEIGH and Professor DEWAR, while a reception fully in keeping with the importance of the occasion was held by the Lord Mayor and was attended by a very distinguished company of scientific workers including foreign savants.

It will be admitted that the history of the Royal Institution is full of interest. Its existence from its foundation has had much in common with human career. It was at first devoted to a mission which failed, it was threatened again and again with extinction from the want of material support, nevertheless it has come out triumphant, as an institution with worthy objects and with praiseworthy results, and has been sustained financially in order to carry on its excellent work by those generous and rich men who have been moved by, and convinced of, the real educational and progressive work which it has done and continues to do. The Royal Institution affords a striking illustration of that proud characteristic of the English nation which prompts it to support all that claims to be philanthropic and devoted to the best interests of the community and this apart altogether from State aid. It has been said that the Germans are a long way ahead of us as a nation in the application of science to manufacture and industry. That may be so, but in regard to original research and the wealth of results therefrom England still holds, and proudly holds, the first position and this she has attained and maintains by voluntary support. The Royal Institution is a leading and a noble instance of the sincerity of this national characteristic and the dawn of its second century will doubtless bring, as we confidently anticipate, further encouragement and stimulus to carry on its excellent work and purposes.

WE have received a copy of the interesting report which Dr. HOPE has recently presented to his sanitary authority on the health of the city of Liverpool in the year 1898—a document which extends to 217 closely printed pages and is full of valuable information concerning the sanitary condition of that city, with special reference to the steps which, under Dr. HOPE'S guidance, the corporation has taken for its improvement. With the general details of sanitary administration, local birth- and death-rates, &c., as set forth in the report, we shall deal on another occasion. We here limit our remarks to one only among the many important matters which are treated of in its pages.

To the medical officer of health the difficulty—we had almost said the impossibility—of obtaining an accurate measure of the healthiness or the reverse of the people under his jurisdiction is one of the most embarrassing of the many obstacles which still retard progress in practical sanitation. The local registrars, for the most part, supply fairly accurate returns of the deaths occurring from time to time in their districts, but when these have been duly abstracted by the health officer and properly distributed so as to allow for mortality in public institutions there remains the almost insuperable difficulty of ascertaining, even approximately, the populations upon which these deaths have to be calculated in order to furnish trustworthy statements of mortality or, as they are commonly termed, rates of death per 1000 living. It is needless to point out that this difficulty increases year by year as the census becomes more remote. On Dr. HOPE'S authority we learn that this difficulty has become exceptionally great in Liverpool where, either because of the recent enlargement of the city or for other reasons specified in his report, the population of the city as at present constituted is, in his judgment, considerably understated in the published returns of the Registrar-General. Dr. HOPE further complains that having himself applied to certain small municipal areas of Liverpool the method which the Registrar-General employs for the estimation of the populations of some of the larger urban centres in their entirety, he obtains populations which make the birth- and death-rates of those areas appear enormous, a result especially deplorable because these are the very districts in which Dr. HOPE has succeeded in securing the largest amount of structural improvement by the sanitary authority, and he is not unnaturally disappointed to find that, on applying the only available test, the death-rate, he is unable to demonstrate such an amount of amendment as might have been hoped for after the large expenditure which has been incurred on account of demolitions and alterations of insanitary property. With regard to the method adopted at Somerset House in estimating the populations of the great English towns there is no mystery whatever. Except in special cases, to which reference will presently be made, it is the practice of the Registrar-General to assume that the same annual rate of growth of population which is known to have prevailed in each town during the 10 years intervening between the last two censuses has continued uninterruptedly since that period. Accordingly, a proportionate addition is made annually to the population of each town and the number so obtained is taken to represent the population at the middle of each year. In certain instances, however, special circumstances have arisen locally which have interfered with the uniform movement of the population, and in such cases the Registrar-General has usually been willing to consider local representations to that effect, and in suitable cases where returns of inhabited houses have been forthcoming to revise the estimates of population of particular towns for which the estimates framed in the usual way have been shown to be erroneous. We know of instances in which this has been done, and it is probable that in the case of Liverpool referred to in Dr. HOPE'S report a similar

course would have been pursued about the middle of the last intercensal period had the necessary particulars from the rate-books been supplied to the central office.

We are very glad to recognise the ability and zeal which Dr. HOPE has for many years displayed in his attempts to improve the sanitary condition of the vast population of Liverpool, but we are confident that he errs in thinking that the immediate remedy which he suggests to meet his own special case would be suitable for general adoption. If we correctly understand Dr. HOPE'S proposal it is this—that the Registrar-General should issue official estimates, even at this long distance from the census, for each of the 11 municipal subdivisions of Liverpool, the population of which ranges from about 16,000 upwards. Statisticians are, however, agreed as to the impracticability of estimating prospectively the population of small districts on the assumption of a constant rate of increase or decrease; and for periods as far remote as the present from the census the attempt to do so would be absurd. At any rate, it is the fact that the Registrar-General has always consistently refused to estimate for anything short of the entire populations of urban districts and in so doing we think that he has acted wisely. Having regard to the exceeding length of the interval between successive census enumerations it is beyond question that the method of the Registrar-General has hitherto given results which are in most cases satisfactory, and under existing circumstances we know of no other plan which would be likely to prove superior. It has frequently been contended in these columns that the difficulty which besets Dr. HOPE and his colleagues in the public health service will never be surmounted except by a more frequent numbering of the people. We therefore agree with him in advocating recourse to a quinquennial census for the whole country, simple in character and similar to that which has been established by recent legislation for the metropolis. This course has recently been urged on the President of the Local Government Board by the Council of the Royal Statistical Society and we are of opinion that the expense inseparable from a more frequent enumeration should no longer be permitted to stand in the way of social and sanitary reforms which are believed to be necessary by those who have the best title to be heard.

THE work of the London medical societies for the year 1898-99 is now approaching its close and indeed several of these learned bodies have already discontinued their sessions until October next. The time therefore seems opportune to draw a moral from the experiences of the past year. And let us start by saying that it would be difficult to exaggerate the value of our medical societies not only to the London medical man but to his brother of the provinces. The work which they do and the careful way in which they do it alike excite our admiration. They stimulate young members of the profession and they enable the older ones to see the drift of new light and new investigation. Their importance is universally recognised. They are no longer the monopoly of the metropolis and of its central parts, but they are to be found in every provincial town of any size. A casual visitor from London at one of the meetings of a provincial medical society—say, at Newcastle, Leeds, Nottingham, Manchester, or Liverpool—is apt to be astonished when he considers the cases which are brought forward and the skill with which they are diagnosed, treated, and discussed. There may or there may not be room for a post-graduate school in London and in other large and central towns, but undoubtedly the chief post-graduate education which medical practitioners get is in the medical societies and in the medical journals which devote an ever-increasing amount of space to the reports of their proceedings. We have said enough to show that we write in no depreciative spirit of the medical societies and that we desire to promote only their increased usefulness and support. But there exist as regards such societies certain defects to which we wish to call attention.

For one thing, in the London medical societies we should desire to see a larger attendance. Even in the best societies and on what may be called field nights the numbers are disproportionate to the importance of the papers and to the time and trouble which have been spent by the gentlemen who have prepared them for the consideration of the society. This is partly due doubtless to medical journalism. Members of the profession know that in their medical paper they will find the chief points of all the communications recorded with faithfulness and accuracy. Still, we cannot think this explanation altogether satisfactory. There are two kinds of absentees at the London societies. The first consists of the older and more eminent members of the society who having filled all the offices and attained a success in practice which leaves them little leisure are apt to prefer their own firesides when it is time to go to the society. It is hard to blame them. But even they would be a little more frequent in their attendance if they knew how their presence is appreciated and how pleasant it is to the members generally to hear the cases and the conclusions of younger colleagues discussed in the light of a longer and a larger experience. The disappearance of past presidents and honorary secretaries is often painfully abrupt and complete, as if the efforts of office had exhausted alike their energy and their interest in the society which they serve so well for two or three years. Perhaps the only cure for this defect of our metropolitan societies would be a diminution in their number. It is not in human nature to attend medical societies every night in the week and such attendance cannot be given in these busy days without serious neglect of other duties. Even if it could, the benefit would be very questionable. No professional man does well to act as if his profession covered all truth and duty. It is well for him to seek the society of men of other professions than his own and to give as much of his evening time to domestic duties as can well be spared. Clearly if the number of our medical societies were greatly reduced it would be more possible for busy men to attend with comparative regularity without encroaching on time necessary for the other large duties of life in this busy age.

The other noteworthy absentees from our metropolitan medical societies are the great body of general practitioners. Many explanations of this fact may be given. The duties of general practice are not over so soon or so

definitely as those of the consulting practitioner. They are often as hindering in the evening as in the morning. Another reason is to be found in the great multiplication of local societies. It is remarkable, as we have said, to what an extent this process has gone, so that in some suburbs there are two or three medical societies which are easy to reach and the proceedings at which are a little more social and less formal than those of the more central societies. It has appeared to some critics that our great societies are a trifle too strict and formal in their style and that they are open to the charge of dealing too exclusively with rare cases and difficult subjects. They abstain too severely from discussing those questions which deeply concern the rank and file of the profession and which affect the dignity and the reputation of medical practice. The removal of a stomach, the suturing of a heart, or the cure of an abdominal aneurysm are, no doubt, great feats, but they are of rare occurrence and constitute but a fraction of the work of medicine. They do not appeal to the general practitioner so much as the treatment of influenza or pneumonia, the pathology of headache, or the treatment of infantile diarrhœa. To this class of practitioner, too, there seems to be in the larger medical societies a serious want of interest in the evils which affect medical practice—such, for example, as hospital abuse. An enormous amount of good might be done by instituting an occasional social evening when men of all grades of practice might unbend and discuss with each other in informal ways the problems of medical life among the poor with a joint view to their welfare and to the dignity and efficiency of medical practice. The sum of what we have said is this—that medical societies are amongst the best agencies in the profession, but that they could be made more useful and more attractive by becoming fewer and by such an occasional relaxation of their severity as would bring them into touch with the whole medical profession and the whole experience of medical life.

Annotations.

"Ne quid nimis."

THE BIRTHDAY HONOURS AND THE MEDICAL PROFESSION.

THE birthday honours, contrary to general expectation, are neither numerous nor distributed with any special reference to the eightieth birthday of the Queen. There is no great recognition of personal services to the Crown, there are no new Peers, no promotions in the Peerage, and no new Privy Councillors. For the most part the honours were what may be called perfunctory, thatis, they take the form of advancement in the various orders of gentlemen already decorated. Two eminent physiologists and a well-known provincial surgeon are the only members of the medical profession who receive titular distinction. Professor J. S. Burdon Sanderson, for many years Waynflete Professor of Physiology at Oxford and now Professor of Medicine at that University, becomes a baronet. Professor Michael Foster, the equally famous head of physiological learning at the sister University of Cambridge and secretary to the Royal Society, receives a K.C.B. Mr. William Mitchell Banks, the popular and able Liverpool surgeon, obtains the knighthood to which his excellent work as surgeon and teacher in Liverpool and as a representative of the Victoria University on the General Medical Council entitles him. Surgeon-General A. A. Gore, late Principal Medical Officer in India, receives a C.B., and Lieutenant-Colonel W. G. King, I.M.S., a C.I.E.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE names of candidates for the vacancies in the Council of the Royal College of Surgeons of England must be sent to the Secretary not later than June 12th. Any proposals to be placed on the agenda for the annual meeting of Fellows on July 6th must be sent to the Secretary by June 15th. It will be remembered that in 1898 no quorum was formed at the January meeting of Fellows and therefore that meeting was abolished, yet no quorum was formed at the July meeting. As only one meeting is to be held annually in future it is surely possible to obtain the attendance of the necessary 30 Fellows. If repeated failures to obtain meetings occur the Council will not improbably decide to alter the by-law under which the meetings are at present summoned.

THE MEDICAL EDUCATION OF WOMEN.

As several inquiries have reached us respecting the medical education of women the following information may be useful. In the first place no woman ought to embark on the career of medicine without a reasonable certainty of having sufficient capital, not only to pay for her training and keep her during at least five years of student life, but also to support her for the first few years after qualifying. Paid appointments for newly qualified medical women are few and far between. To women who are being sent out under the auspices of some society to India or elsewhere and are certain of immediate employment this does not so much apply; but even in these cases it is very unwise for a girl to start as a medical student unless she is sure of sufficient money to keep her without doing outside work and to allow of a good yearly holiday during her period of study. A medical student in her student days ought not to have time to earn anything towards her own support. She should live well and be able to take good holidays without worry about money matters or her health will probably break down and she will be useless even if she succeeds in passing her examinations. As regards age, 20 years is quite young enough to begin the medical portion of her training. She should have a thoroughly good general education until she is 18 years of age, when she ought to be able to pass any of the preliminary Arts examinations required before she can proceed to her medical work. The best of these Arts examinations from the medical students' point of view is the matriculation at the London University. The next two years might be profitably employed in acquiring a thorough knowledge of French and German, preferably by residence abroad, and of drawing; skill in these three branches and some knowledge of the ways of the world would be of great value to her later. She would then begin her medical work as a more or less accomplished and well-educated woman and not as a raw schoolgirl. The choice of a medical school depends in some measure on the degree or diploma which the student means to take. The best medical qualification open to women is the degree of the University of London. The best place of study for a woman who aims at the London degree is unquestionably the London Royal Free Hospital School of Medicine for Women. This school admits women students only. It is thoroughly well equipped in every department and its students receive full instruction in all subjects required in the medical examinations, including the preliminary scientific at the London University. The school, which was the first institution in the

British Isles where a woman could complete her medical education, has been recently largely rebuilt and more laboratories are in course of erection. The students receive their hospital training at the Royal Free Hospital, where many non-resident posts, valuable for the experience they afford, are open to newly qualified women. Full information may be obtained from the secretary, Miss Douie, M.B. Lond., London School of Medicine for Women, 30, Handel-street, Brunswick-square, W.C. The degree in medicine at the Universities of Edinburgh, Glasgow, St. Andrews, and Aberdeen are now open to women. Women students only are admitted at the Medical College for Women, Chambers-street, Edinburgh, and at Queen Margaret College, Glasgow. Women who wish to take the Durham University degree may enter the classes at the College of Medicine, Newcastle-on-Tyne; here they study with the male students. In Ireland women are admitted for medical study to the Royal College of Surgeons, Dublin; the Medical School, Cecilia-street, Dublin; and to the Queen's College at Cork, Belfast, and Galway. Information may be obtained by applying to the secretary at any of these institutions.

CHLOROFORM AT DENTAL HOSPITALS.

THROUGH the courtesy of Dr. John Macmillan of Edinburgh we have received notes of a death which occurred at the Dental Hospital, Edinburgh, on May 5th. As some misstatements have appeared in the lay press we give Dr. Macmillan's own account of the occurrence. The patient, a young woman, aged 18 years, was taken to the Dental Hospital by her mother to have some teeth extracted. She was examined by Dr. Macmillan who found her organs healthy and chloroform was then administered by, we presume, the open method. We understand that the recumbent posture is adopted for patients who take chloroform at this hospital and that the duty of administering it is deputed to a specially appointed medical man. Except the facts that the girl died and that a careful examination was made of the body after death, which showed that there was no departure from the normal in any of the viscera, we are without particulars. We understand, however, that in Dr. Macmillan's opinion death was due to paralysis of the respiratory centre and that no circulatory trouble occurred. This of course means that an overdose was taken, or, to put it perhaps more accurately, either too strong a vapour was inhaled or too much chloroform was given from start to finish. It is not our purpose, however, to comment upon either of such explanations; we shall confine our attention to the question:—Is it a wise plan for any dental institution to adopt chloroform as its routine anæsthetic? Speaking generally nitrous oxide has for many years been adopted as the most suitable anæsthetic for use during the extraction of teeth. Nor is it too much to say that the dental profession has for years set its face against the employment of chloroform in dental practice. Snow and, in his earlier days, Clover were not averse to giving chloroform in dental cases, but the large number of deaths which occurred under it led to the substitution of nitrous oxide when that anæsthetic was proved to be at once adequate and safe. Even the most enthusiastic supporter of the former anæsthetic cannot attempt to place it on a parity with nitrous oxide in the matter of safety. Nor is the cause of this hard to find. The anæsthesia of "laughing gas" must attain its acme to be of any value, and its acme always lies within a zone of safety. With chloroform the most experienced man may make mistakes. The drug shows the symptoms of its progressive action from an initial stimulation to a final paralysis of the nerve centres presiding over the tripod of life. In the anxiety which the chloroformist feels that the patient shall remain "well under" when the chloroform is no longer being inhaled he is apt to prolong the narcosis to the fourth degree of Snow in which the medulla oblongata is already rendered paretic. At this stage any interference with respiration, as by the alteration of the position of the head of the patient, or causing a change in the anatomical relation of the parts, or the pushing back of the tongue such as commonly occurs when lower teeth are extracted, may prove sufficient to determine a fatal issue. The drug cannot be eliminated and the breathing rendered feeble by the lowering of nerve energy fails altogether. Dental operations, as they are extremely painful and the severance of the tissue implicates directly nerves anatomically associated with the most important members of the cranial series, are peculiarly obnoxious to incomplete anæsthesia. The knowledge of this and of the fact that many deaths have occurred in persons incompletely protected by chloroform affords yet another reason which leads the chloroformist to induce a deeper degree of narcosis than would be adopted in other operations. It is then surprising that with these facts patent chloroform should be employed at dental hospitals. We hope that this sad experience may lead to a change in the direction of adopting nitrous oxide as a routine anæsthetic and the discontinuance of the employment of chloroform except in cases where a very prolonged anæsthesia is required.

FISH FOOD.

As islanders living for the most part in thickly populated towns and villages, the inhabitants of Great Britain (and to a lesser extent of Ireland) are largely dependent upon foreign food-supplies, which in time of war would at any moment be liable to be interfered with if not entirely cut off; the possibility of fish becoming the chief ingredient in British bills of fare is therefore well worthy of consideration. At present the methods in vogue for capturing sea fish are more or less crude and old-fashioned, little or no change having taken place during the century, while the distribution of the produce in a perfectly fresh and satisfactory condition still leaves much to be desired. The various parties interested have been content to keep to the old grooves, and yet reform would not be difficult. Given a little inventive thought and the expenditure of some capital and it should be an easy matter to bring about improvement to the immense advantage alike of providers and consumers. Fishermen, generally speaking, are poor folk who enjoy scanty earnings in return for great risks and from the point of view of comfort—not to say luxury—they and their families are not much better off now than they were 100 years ago. If only the demand for fish food could be permanently doubled, or better still trebled, while at the same time the means of placing the perishable goods upon the market were adequately cheapened and accelerated, not only would the hard lot of our fishermen be made easier but their numbers would also increase to the vast gain of the nation. Fish food has this great superiority over flesh food—that the purchase and upkeep of the animals that yield it cost absolutely nothing at all, except in the case of salmon and oysters. Sheep, cattle, pigs, and poultry are all expensive things to purchase and maintain, but the edible fauna of the ocean finds its own living. On this account alone, if for no other reason, fish food ought to be far cheaper than butcher's meat, and should there be an enhanced demand it would probably become so. The seas which surround our coasts contain many kinds of edible fish in great abundance—more than is sufficient to meet requirements; and even though any particular species should grow scarce it would be possible, we should imagine, to replenish the stock by waging war against the natural foes that prey

upon the immature progeny. The question of fish food has many aspects, but that with which we are mainly concerned is its value as nutriment. We know that on a diet which includes a fair amount of butcher's meat Englishmen are capable of doing at least as hard a day's work as any of their compeers of other nationalities, but whether this would continue to be the case if fish came to be substituted for flesh is a point which still calls for authoritative settlement. According to the analytical chemists 15 parts of the flesh of fish have about the same nutritive value as 12 parts of boneless beef. No doubt this is correct as far as it goes, but after all the most convincing way of settling the question would be by feeding a number of people for determined periods on fish and flesh alternately, keeping for each individual an accurate record of the bodily condition and amount of work done every day. That experiments of this description have already been made we are aware but they were always carried out on too small a scale. In order to be thoroughly conclusive the test cases should be sufficiently numerous to neutralise possible idiosyncrasies and to establish a trustworthy average in all walks of life. Poisonous fishes are not likely to be met with in British waters, but that fish of various species do occasionally cause sickness in the consumer cannot be denied. In such cases the offending animal was itself most probably out of health when caught—a point which could have been determined with great certainty by a bacterial examination and approximately by simple inspection. But before fish food can become popular in this country the existing prejudice in favour of what is called solid food will have to be overcome. There are not many Englishmen of the working order who would be content to say that they had dined unless flesh or fowl formed the staple of the meal. Object lessons on a large scale and frequently repeated afford the only remedy.

DUM-DUM BULLETS.

THE question of the permissible limits of the use of lethal weapons, in connexion with the action of the Peace Congress at The Hague regarding the Dum-dum bullet, opens up a very wide and difficult subject. The object to be secured in warfare is not, of course, any unnecessarily painful mutilation or even the death of the enemy, but his prompt disablement so as to prevent at once any further fighting on his part and to put him at any rate *hors de combat* as far as the campaign in which he is engaged is concerned. Of course, if he is killed both objects are effectually obtained, but apart from considerations of humanity there is nothing to be gained by the employment of any needlessly cruel methods. But war is war. If it cannot be altogether prevented then the sooner it is ended the less is the loss of life not only from wounds but from disease. The object of fighting is victory; and the more speedily obtained the better. It was found in Indian hill warfare that the Lee-Metford bullet did not adequately protect the troops using it and the Dum-dum bullet is the result. It is not an explosive bullet, in the sense of containing any explosive substance, but having a soft metal nose which expands when the bullet has once penetrated it has been found to possess a "stopping" power which the Lee-Metford bullet did not. That this property should be present is the essential point, and the Government of India are still making experiments with the view of obtaining a rifle projectile which will prove adequate for their requirements in the mountain warfare with the semi-civilised tribes in which it has so often and so reluctantly to take part. It is an absurd libel on that or any other Government to suppose that they have any object in seeking to design or employ any needlessly cruel means of effecting their purpose. The amount of destruction which is dealt out by field artillery, Maxims, and other methods of warfare probably far exceeds that inflicted by "shoulder gun soldiers," as gunners call them, but no nation hesitates to use these arms.

HOSPITAL SUNDAY AND THE ELECTROPHONE.

THE Electrophone Company inform us that "on the suggestion of certain leading divines" they will fit the electrophone in the principal London hospitals on June 11th, Hospital Sunday, so that the patients will be enabled to hear both the morning and evening services. The scheme is gratuitous and the Electrophone Company will bear the cost of the connexion. This is a kindly thought, but it is to be hoped that the apparatus will be arranged on the separate tube principle and not on the system whereby an enormous mouthpiece shouts at large, for this would be extremely trying to a patient who was very ill.

THE FESTIVAL DINNER OF THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

THIS annual dinner was held in the Whitehall Rooms, Hôtel Métropole, on May 31st, when the chair was occupied by Sir Charles Hall, the Recorder of London, who made an eloquent appeal on behalf of the hospital. Sir Henry Burdett said that although he was often represented as opposed to special hospitals he could speak in the strongest terms of the efficiency of the management of the National Hospital, and Sir James Crichton Browne, who is a vice-president of the hospital, pointed out how largely the high reputation of the National Hospital was due to the brilliant medical and surgical staff which included so many men of European reputation; diseases of the nervous system were of such complexity and the questions of the management of such a hospital required such special knowledge that it was only by acting on the advice and wise counsels of the staff that the hospital could hope to maintain its present position. Dr. Buzzard responded for the staff who, he said, were ever ready to devote their best energies to their laborious work so long as the recipients of their advice were the really poor. Donations to the amount of £3000 were announced by the secretary and general director, Mr. Burford Rawlings.

PNEUMONIA COMPLICATED WITH CEREBRO-SPINAL MENINGITIS.

THE following case related by M. Rendu at the meeting of the Société Médicale des Hôpitaux, Paris, on May 12th is of interest not only as a rare example of recovery from pneumonia complicated by cerebro-spinal meningitis, but also because it supports M. Netter's view of the relationship if not identity of the pathogenic agent of pneumonia and cerebro-spinal meningitis, at least in the majority of cases. The patient was a healthy girl, aged five years. A veritable epidemic broke out in the house in which she resided. A sister had rigors, a temperature of 104° F., intense angina, and consecutive adenitis and suppurative otitis. On the second day of the suppuration the patient was taken ill. A week later another sister was attacked with apical pneumonia. The patient whose case is related was seized with a severe rigor followed by fever and delirium. On the following day she had two convulsions and became comatose, with pupils equally contracted, a pulse of 140, and a temperature of 104·3°. On the third day she was somnolent, the pupils were still contracted, and no signs were found in the chest. On the fourth day there were signs of incipient pneumonia at the right apex. The crisis occurred on the seventh day and convalescence seemed to be commencing, but on the

eighth day the temperature suddenly rose to 104°, the features became immobile, and the eyes did not blink when the fingers were passed before them. The pupils were widely dilated and almost insensible to light, the jaws were closed, there was grinding of the teeth, the head was retracted, and the upper limbs were rigid and extended. The lower limbs were flexed. The thighs, which were drawn up, were extended with ease when the child was lying down, but with difficulty when she was sitting (Kernig's sign). The respiration was irregular. There were signs in the chest of recrudescence of the pneumonia. The signs of meningitis increased, the child was unconscious, the pupils were large and insensitive to light, the stiffness of the neck increased, and the rigidity of the limbs was permanent. The patient gradually recovered; the temperature became normal on the fifteenth day but the rigidity of the limbs persisted in some degree until the twenty-fifth day. M. Rendu did not doubt that the pneumococcus was the cause of the otitis and adenitis in the first case. The onset was identical in all three cases and was that of pneumonic invasion—a violent rigor, followed after some hours by marked pyrexia.

THE WHITE LEAD INDUSTRY.

SIX years ago a departmental committee was appointed by the then Secretary of State, Mr. Asquith, to inquire amongst other things as to whether the special rules which existed with regard to the manufacture of white lead were sufficient and to suggest any precautions necessary with regard to the industries specified for the protection of life or health. The committee was composed of several able men and their report, which was issued in a Parliamentary paper towards the end of 1893, contained a summary of suggestions and recommendations of great promise from the point of view of improving and protecting the health of the operatives while as little as possible interfering with the legitimate pursuit of an indispensable manufacture. No serious State action appears, however, to have been taken to apply the recommendations of this committee, for last week the Home Secretary placed upon the table of the House of Commons, according to the *Times* of June 3rd, a paper containing 35 special rules which are proposed to be applied in future to all white lead factories, and these special rules embody the recommendations of Mr. Asquith's Lead Committee with, however, some important additions. The special rules affect occupier and employé alike. The plans of all white lead factories which it is proposed in the future to construct are to be submitted to, and approved in writing by, the Chief Inspector of Factories. Emphasis is very properly laid upon the necessity of keeping as far as possible, as was enjoined by Mr. Asquith's committee, the machinery and chambers involved in the manufacture of white lead moist. Similarly also occurs a recommendation to the effect that no woman should be employed in the white beds, the rollers, the wash-becks, the stoves, or in packing dry white lead, and that these departments should be worked in future only by adult males. We are glad to note that more stringent measures are to be imposed providing for more regular and systematic medical examination. A duly qualified medical practitioner must be appointed for each factory and no person is to be employed in a lead process for more than a week at a time without a certificate of fitness granted after examination by the appointed surgeon. Each employé is to be examined once a week and his suspension may be ordered by the surgeon whose sanction is further necessary before he can return to work. Finally, when an employé complains of feeling unwell the occupier is bound instantly to give an order upon a duly qualified medical practitioner. Certain duties are similarly to be imposed on the workers. They are to present themselves regularly at appointed times for examination, they are to wear an overall suit and in some cases a respirator, they are to bathe regularly and wash in the lavatory before bathing, and, lastly, they are not allowed to smoke or use tobacco in any form or partake of food in any other but the properly appointed place. In the main, therefore, the special rules which the Home Secretary has recently drawn up simply give effect to recommendations which were made some years ago. As we have said, however, there are one or two amplifications and we trust that since sufficient time has elapsed to enable all the parties concerned to express an opinion upon the practicability of these recommendations the special rules will ere long be adopted and thus minimise, if not remove completely, the dangers incident to the manufacture of white lead.

MEDICAL CERTIFICATES AND THE SCHOOL BOARD.

A CORRESPONDENT writes from the country to ask the following question: "Has the School Board the power to pay for certificates for non-attendance at school due to sickness, and if so what fee do they allow the medical man?" We do not know whether a provincial School Board will be willing to consider the action of the London School Board as a leading case, but on Jan. 21st, 1897, the following motion proposed by Mr. Whiteley and seconded by Mr. A. Riley was agreed to: "That in cases where the magistrate or justices of the peace is or are dissatisfied with the medical certificate furnished, and in cases where the medical certificate is *primâ facie* unsatisfactory (and when the certificate is signed by a registered medical practitioner), the board's medical officer shall in the first instance communicate with the practitioner giving the certificate, and in the event of such certificate being ultimately acted upon the fee of 2*s.* 6*d.* shall be paid by the board for the confirmation of such certificate....." So far as we know payments made under this law have never been questioned by the auditor in auditing the accounts. Therefore, it is plain that a school board has the power to pay a medical man a fee and if under one set of circumstances why not under others? If the London School Board can do so why not a rural board? They are both under the same master—namely, the Education Department.

THE MANCHESTER SEWAGE PROBLEM.

THE Mersey and Irwell Joint Committee proceeded against the Manchester Corporation last week before Mr. J. M. Yates, Q.C., stipendiary, and other justices in the Manchester County Police Court "for knowingly permitting liquid sewage to be carried into the river Irwell and the Manchester Ship Canal contrary to the provisions of Part 2, Section 3, of the Mersey and Irwell Joint Committee Act, 1892." It appears that on July 25th, 1896, the first order of the court was made and the case had been dragging on ever since. In November, 1896, the court ordered the corporation to establish sewage works within 12 months. On Nov. 26th, 1897, the corporation made a further application to the court for the order to be extended till March 25th, 1898, the case being adjourned till May 11th, when the application was dismissed. Summonses were issued on May 17th, 1898, and on July 20th the court granted by consent a further adjournment for six months, and it was understood then that if the corporation would get a scheme approved by the Local Government Board penalties would not be asked for; and towards the end of that six months the Rivers Committee of the corporation received from three eminent experts a report showing that the bacteriological treatment would be efficacious. An inquiry was subsequently held so as to enable the corporation to borrow

£160,000 to go on with the scheme, but on March 15th, 1899, the Manchester City Council failing to ratify the action of the committee sent back the proceedings of the Rivers Committee. The effluent was stated to be no better now than it was in 1896. After hearing evidence on both sides Mr. Yates, in giving the decision of the magistrates, said that they were convinced that the corporation was seriously alive to the necessity of doing something to purify the vast volume of sewage from a population of 600,000 people, and a fine of £10 per day for each of the five days for which the summonses were taken out was inflicted with £50 costs. No doubt there are and have been many difficulties in the way of the disposing of the sewage of a city like Manchester, still we cannot believe that they are unsurmountable.

LONDON SCHOOL NURSES' SOCIETY.

THE first annual meeting of this society will be held at the offices of the London School Board, Victoria Embankment, on June 19th, when the Countess of Aberdeen will take the chair, and will be supported by Lord Reay, the Hon. E. Lyulph Stanley, Mr. Brudenell Carter, and Miss Amy Hughes. The London School Nurses' Society was formed with the object of supplying visiting nurses to elementary schools in poor districts and already three nurses visit some of the poorest schools and attend to the small ills of the scholars—such as sore heels and inflamed eyes—while watching for more serious conditions that would require treatment at the hands of the medical man. Each nurse is able to visit four schools in one day and see about 100 children, who are sent to her one by one by the teachers. As is pointed out by the secretary it will probably be difficult to impress on the public the importance of the work to be done or the necessity for these nurses; but it must be remembered that the sore heel soon becomes poisoned if left to London dirt, and that inflamed eyes often lose all power of seeing simply through neglect. There is no more sure way of securing the health of the people than to arrest small ills at the beginning and a nurse can often see at a glance whether a child should be sent to a medical man. The cost of each school nurse is about £50 a year as her full time is not needed. The committee urgently appeal for subscription or donations, amounting at least to £300 a year, to enable them to carry on the work in Hoxton, Tower Hamlets, and Southwark, and to start three more nurses where they are most needed. All subscriptions should be sent to the Hon. Treasurer at 89, Harley-street, London, W.

THE SALE OF FOOD AND DRUGS ACTS IN PRACTICE.

IT will be conceded that the experience gained from the collection and analysis of 14,000 samples secured under the Sale of Food and Drugs Act should afford some practical lessons. Such an experience is recorded by Dr. Kaye, the medical officer of health of the West Riding County Council, Wakefield, in a paper which he read before the Yorkshire Branch of the Sanitary Inspectors' Association some weeks ago and which has since reached us in the form of a little pamphlet. The perusal of this paper is especially interesting at this time, when we may shortly expect a new Act. Dr. Kaye shows, as we have often shown, that the surest way to reduce the prevalence of fraudulent practices of adulteration is to take greater numbers of samples for analysis. He further shows that, in particular, the adulteration of milk has diminished in accordance with an increased number of samples taken. No opinion is ventured as to how far the Food and Drugs Act should be directed to the control of preservatives in food. The paper was primarily designed for the information and instruction of inspectors as to how to purchase samples, what outfit should be provided, what to buy and what not to buy, and the steps to be taken throughout in order that a case may not subsequently break down for want of compliance with the proper procedure. A historical review of the ancient practice of adulteration serves as a suitable preface and in this occurs the following sentence: "The first real progress in the way of protecting the public health from adulterated foods, &c., *seems to have been* due to the action of the late Dr. Thomas Wakley, Editor of THE LANCET, who in 1850 instituted an inquiry into the various articles of diet and proceeded to 'pillory,' *à la* Labouchere, the offending dealers by publishing their names on a sort of black list." The words which we have printed in italics should have been reduced to the simple word "was," the Sale of Food and Drugs Act admittedly being the outcome of the disclosures of this inquiry.

THE METROPOLITAN HOSPITAL SUNDAY FUND: A MAGNIFICENT DONATION.

THE Metropolitan Hospital Sunday Fund for 1899 has made a promising start owing to the generosity of Mr. George Herring of Hamilton-place, who has given the princely sum of £10,000, the largest individual donation which has yet been received by the Fund. Mr. J. Lane Densham, whose name is well known in connexion with the Mazawattee Tea Company, has given 1000 guineas, and several other considerable donations have also been received.

THE NEW FELLOWS OF THE ROYAL SOCIETY.

WE are glad to be able to congratulate four members of our profession on having attained the honour of being elected Fellows of the Royal Society. Major David Bruce, R.A.M.C., is a graduate of medicine of the University of Edinburgh. He was the first, in the year 1887, to successfully isolate and cultivate the micro-organism of Malta fever, the micrococcus Melitensis. Mr. Henry Head, M.D. Cantab., is an assistant physician to the London Hospital and has made some important researches upon the relation between visceral diseases and cutaneous tenderness. Mr. Ernest Henry Starling, M.D. Lond., is well-known for his valuable researches in physiology, and Mr. Bertram Coghill Alan Windle, M.D. Dub., is the Professor of Anatomy and Dean of the Medical Faculty at Mason College, Birmingham.

MR. CHAPLIN'S DIFFICULTIES.

LAST year's blundering on the subject of vaccination pursues the Government like a Nemesis. In last week's debate in the House of Commons on the Local Government Board Vote they were deserted by their friends and badgered by their foes, and though when the division came the usual party discipline prevailed Mr. Chaplin had not a single Ministerial supporter all through the discussion. His opponents took credit to themselves for having forced the Government to grant the conscience clause, and, in the matter of the appointment of vaccination officers they did their best to make Mr. Chaplin yield further or at least to emphasise the difficulties of the situation. The improvement in the returns of infantile vaccination in various parts of the country is not to the liking of the Anti-Vaccination League and they are anxious to find material for another popular agitation. If only they could get the public, or any considerable part of it, to regard them once more as martyrs their object would be gained, and, remembering the imprisonment of the Keighley Guardians many years ago, they appear to think that the Leicester Guardians might now be similarly dealt with and with similar results. True,

the refusal of the Leicester Guardians to appoint a vaccination officer seems less likely to lend itself to their purpose than did the refusal of the Keighley Guardians to prosecute defaulters, but in their estimation any grievance is better than none and so Mr. Chaplin is asked if he will imprison the Leicester Guardians if they will not find the money to pay a vaccination officer. It is certainly unfortunate that he seems here to have rather played into the hands of his enemies by giving them the opportunity of alleging that the principles of local government are being infringed when guardians have to pay the salary of officers who are in a sense independent of them. But that, again, is only part of the doings of Nemesis. Last year the Government would not take the trouble or responsibility of introducing a really good Bill and now they are paying the penalty, for Mr. Chaplin cannot afford to let the Leicester difficulty remain undealt with and still less can he afford to deal with it by yielding. Looking to their unfulfilled promises in the matter of revaccination, it is not surprising that the Government receive little sympathy in their difficulties either from the medical profession or from their own supporters.

DANGEROUS PAVEMENTS.

WHERE the local authorities do not undertake or contract for the cleansing of footways and pavements adjoining any premises they may make by-laws imposing this duty on the occupier of any such premises. This is the substance of an important provision in the Public Health Act which may place occupiers under some responsibilities which have not perhaps been considered. The butcher or the greengrocer probably gives little heed to the responsibility which may arise when by negligence he allows the pavement immediately opposite his shop to become dangerous through some person stepping on a piece of fat, orange peel, or banana skin. It frequently happens that the area in front of a busy butcher's shop becomes slippery, especially in the hot weather, and in the event of an accident, which is not at all improbable, the butcher or greengrocer might be liable for very substantial damages, as indeed he ought to be. Yet there is ocular evidence on the pavement day by day opposite most greengrocers' and butchers' shops in the metropolis of negligence in this matter which might lead to serious results. In many cases we have seen the pavements thus rendered quite dangerous to the unwary passer-by. The provisions of the Public Health Act, in our opinion, should be very strictly enforced in such a case, and, further, the police should be empowered to arrest a person who is found guilty of throwing a slippery substance like orange-peel on the pavement.

RED LIGHT AS A THERAPEUTIC AGENT.

IN our conscious superiority to our forefathers we have been used to look with contempt on their practice of treating cases of small-pox by means of red light in the form of red blinds, curtains, and coverlets, but with our present knowledge of the chemical and physical action of the different rays of the spectrum and the influence of light and darkness on life in its highest and lowest manifestations we may have felt a suspicion that, whatever the theory of the mediæval physicians, their practice may have had a scientific basis. In the last number of the *Zeitschrift für Krankenpflege* we find that it has been tried, and apparently with remarkable results, in the treatment of measles. A child, eight years of age, having sickened with an attack of measles of more than usual severity, was on the second day brought under the influence of the rays of least refrangibility, the windows being fitted with red blinds and a photographer's lamp with an orange-yellow globe being used for artificial light. In three hours the rash had disappeared, the fever had subsided, and the child was playing cheerfully, complaining only of want of light. The blinds were consequently removed, when three hours later the medical man was summoned to find that the eruption and fever had returned and the child was weak and prostrate. The red light having been resumed the rash disappeared in little over two hours, as did the fever, this time permanently. In two more days the cough had ceased and the child was well in every respect. The brother and sister and a fourth patient infected from the first case were treated in the same way and with like success. In the great epidemic of small-pox in 1871–72 some cases were reported as having been kept in dark rooms with great benefit, especially as regards the pustulation and pitting. Clearly what virtue there may be in this method lies in the exclusion of actinic rays and the substitution of red or orange light for total darkness has obvious advantages as in the case of photographic manipulations.

"THE SANITARY CONDITION OF ST. PANCRAS."

IN our issue of June 3rd we commented upon a report of a special committee of the Health Department organisation of the Vestry of St. Pancras. We had not, however, before us the minutes of evidence upon which this report was founded. The report referred to the "disorganisation" or "demoralisation" of the health department and in view of the importance of the matter we have applied to the Vestry of St. Pancras for a copy of the minutes of evidence, asking the vestry either to send us a copy or to be good enough to inform us as to where we can procure a copy. As soon as we have the evidence before us we shall return to the matter again.

WE have received from Mr. W. Hugh Spottiswoode a copy of a memoir of the late William Spottiswoode which from the fact that the centenary of the Royal Institution was celebrated this week is of great interest. It contains an address "On the Old and New Laboratories" delivered before the Institution by Mr. Spottiswoode who was closely associated with its administrative affairs. He was also President of the Royal Society from 1879 to 1883 and had devoted much of his time to physical research. Mr. Hugh Spottiswoode has recently presented to the Institution the collection of physical apparatus which belonged to his father, an excellent "Woodbury gravure" of whom forms the frontispiece to the memoir.

MR. ROBERT WALLACE, M.P. for East Edinburgh, while speaking in the House of Commons on Monday night last was suddenly seized with cerebral hæmorrhage. When he was unable to continue his speech and was discovered to be suffering Sir George Pilkington and Sir William Priestley came to his aid. Mr. John Burns accomplished no mean athletic feat by lifting Mr. Wallace in his arms and carrying him out of the House. Later he was removed to Westminster Hospital where he died early on Tuesday morning. The tragedy elicited the fact that the House of Commons is entirely without ambulance accommodation—a state of things which calls for alteration.

THE DUKE OF MARLBOROUGH has given, in memory of his grandmother, Frances Ann Duchess of Marlborough, a donation of £500 towards the cost of providing the new operating theatre of the Radcliffe Infirmary, Oxford, with appliances and equipment of the latest completeness. The operating theatre has been erected by funds supplied by Mr. J. H. Mason, of Eynsham Hall, Oxford, and by a subscription raised some years ago in memory of the present Duke's grandfather.

DR. BEATTIE CROZIER, the author of "Civilisation and Progress" and "A History of Intellectual Development," is

to be the recipient of an honorary LL.D. degree at the hands of the University of Toronto, the Governor-General of Canada and Dr. William Osler, F.R.S., being at the same time similarly honoured.

H.R.H. PRINCESS CHRISTIAN has signified her intention of presiding at the annual meeting of the Royal British Nurses' Association to-day (Saturday, June 10th) and of presenting badges to members on the occasion.

THE annual distribution of diplomas awarded by the National Health Society took place on the afternoon of June 3rd at Grosvenor House, W., the presentations being made by H.R.H. Princess Christian.

LORD ROSEBERY has promised to be present on Founder's Day, Saturday, July 29th, at the Royal Medical Benevolent College, Epsom.

THE ROYAL MILITARY TOURNAMENT.

THERE is every reason to believe that at the close of the Royal Military Tournament which will have taken place by the time we have gone to press the receipts will be found to be even greater than last year which was a "record" one. Many of the seats, we understand, have been paid for by the charitable who wished to help the military charities but were unused, hence the seats which were noticed to be unoccupied. Society has come to look upon the Tournament as a feature of the London season and it is quite safe to assume that it will always prove a success. Since its inception we have taken the greatest interest in its welfare and by criticising from a hygienic point of view the home of the Tournament we have endeavoured to help the authorities to turn an unsuitable building into a sanitary success. Under the able direction of the medical officers who have been in charge of the Tournament the Royal Agricultural Hall has been improved year by year and at the present time the hygienic conditions of the building are as perfect as it is possible to make them considering that the Hall at Islington was never intended to be put to the threefold use at the same time of a theatre, a military barracks, and stables. As we have said the entertainment is an assured success and it is difficult to understand why the authorities do not remove the Tournament to a more suitable building or even erect either a permanent or temporary building of their own. We have urged this course on several occasions and we feel certain that the press generally would support such a departure. An amusing illustration of the difficulties with which the medical officers have to contend was shown by the action of some of the sailors engaged. Both sailors and soldiers, as a rule, do not love too much fresh air in their sleeping quarters and they frequently prefer the somnolent effects of a vitiated atmosphere. Where some 300 men are sleeping in such a small space as is that which the Agricultural Hall is able to afford it is easily understood that it is necessary to have as many windows open as possible. This, however, many of the sailors resented and it occasionally happened that a medical officer conscious of his responsibility with regard to the health of those under his charge and making a tour of the sleeping quarters in the small hours of the morning found that a sailor had climbed to the roc and closed a window, his excuse on being caught being usually, "Oh, sir, I felt such a draught." In a properly constructed building such incidents could not happen. In spite of the difficulties with which they have to contend the medical officers do their work excellently and both Major H. E. R. James, R.A.M.C., and his assistant, Surgeon-Major Crooke-Lawless of the Coldstream Guards, are to be congratulated on the perfection of the arrangements this year.

While, however, congratulating the medical officers we must not forget Veterinary Major R. Rowe, A.V.D., who had charge of the animals in the building which (besides some 370 horses) included two camels, a kangaroo, and an emu; the last-named, it may be mentioned in passing, showed a great partiality for milk. We believe that special arrangements were made to keep the stalls scrupulously clean and the evidence of both sight and smell showed that these arrangements were well carried out.

The arrangements for accidents which might happen either to the performers or the general public included a hospital and 20 men of the Royal Army Medical Corps stationed at various points in the building ready in case of emergency. The St. John Ambulance Brigade was also represented. We are glad to be able to state that the casualties this year have been of a purely minor character.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ELECTION OF MEMBERS OF COUNCIL.

ON Thursday, July 6th, the election of members of Council will take place. Usually at least three vacancies occur, but this year, as we mentioned in THE LANCET of May 13th, p. 1309, in consequence of the term of office of Sir William Mac Cormac, Bart., K.C.V.O., coming to an end during his Presidency, he will continue to be a member of the Council for one year longer, and therefore at this election there will be only two vacancies, for no vacancy through death has occurred.

The following list of the 24 members of the Council gives the date at which each member retires:—

Retire in 1900: Mr. F. Richardson Cross, Bristol Royal Infirmary; Mr. Henry Morris, Middlesex Hospital; and Mr. John Langton, St. Bartholomew's Hospital (first elected 1890.)

Retire in 1901: Mr. H. G. Howse, Guy's Hospital (first elected 1889); Mr. Edmund Owen, St. Mary's Hospital; and Mr. Rickman J. Godlee, University College Hospital.

Retire in 1902: Mr. Thomas Bryant, Guy's Hospital (first elected 1880); Mr. T. Pickering Pick, Senior Vice-President, St. George's Hospital (first elected 1888); and Mr. J. N. C. Davies-Colley, Guy's Hospital.

Retire in 1903: Mr. A. Willett, St. Bartholomew's Hospital (first elected 1887); Mr. H. T. Butlin, St. Bartholomew's Hospital; and Mr. F. Treves, London Hospital.

Retire in 1902: Mr. Reginald Harrison (first elected 1886); Mr. Howard Marsh, Junior Vice-President, St. Bartholomew's Hospital (first elected 1892); and Mr. J. Hardie, Royal Infirmary, Manchester.

Retire in 1901: Mr. N. C. Macnamara, Westminster Hospital; Mr. A. W. Mayo Robson, Leeds General Infirmary; and Mr. W. Watson Cheyne, King's College Hospital.

Retire in 1900: Sir William Mac Cormac, Bart., K.C.V.O., President, St. Thomas's Hospital (first elected 1883); Sir Thomas Smith, Bart., St. Bartholomew's Hospital; Mr. J. Tweedy, University College Hospital; and Mr. Alfred Cooper.

Retire in 1899: Mr. T. R. Jessop, Leeds General Infirmary; and Mr. J. Ward Cousins, Royal Portsmouth Hospital.

An analysis of these names shows that at present St. Bartholomew's Hospital has five representatives; Guy's Hospital has three representatives; University College Hospital has two representatives; and each of the following hospitals has one representative: St. George's, King's College, London, Middlesex, St. Mary's, St. Thomas's, and Westminster. There are thus 17 members of the Council attached to the London medical schools, there are two members of the Council who are attached to special London hospitals, and five are attached to provincial hospitals. Leeds General Infirmary has two, and Bristol Royal Infirmary, Manchester Royal Infirmary, and the Royal Portsmouth Hospital have each one.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 7265 births and 3872 deaths were registered during the week ending June 3rd. The annual rate of mortality in these towns, which had declined in the three preceding weeks from 17·7 to 16·0 per

1000, rose again last week to 17·7. In London the rate was 17·0 per 1000, while it averaged 18·2 in the 32 provincial towns. The lowest rates in these towns were 8·5 in Brighton, 10·2 in West Ham, 11·5 in Cardiff, and 13·4 in Norwich; the highest rates were 22·6 in Preston, 22·9 in Wolverhampton, 24·3 in Liverpool, and 26·5 in Manchester. The 3872 deaths included 386 which were referred to the principal zymotic diseases, against 355 and 351 in the two preceding weeks; of these 142 resulted from measles, 80 from whooping-cough, 69 from diphtheria, 45 from diarrhœa, 27 from scarlet fever, and 23 from "fever" (principally enteric). The lowest death-rates from these diseases were recorded in Brighton, Croydon, and Cardiff, and the highest rates in Leicester, Bolton, Burnley, and Manchester. The greatest mortality from measles occurred in Nottingham, Liverpool, Bolton, Manchester, Salford, and Burnley; from scarlet fever in Bolton and Burnley; from whooping-cough in Oldham and Burnley; and from "fever" in Huddersfield. The 69 deaths from diphtheria included 24 in London, nine in Sheffield, eight in Leicester, four in Liverpool, and three each in West Ham, Swansea, Manchester, and Leeds. No fatal case of small-pox was registered during the week under notice either in London or in any other of the 33 large towns; and only one small-pox patient was under treatment in the Metropolitan Asylums Hospitals. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of last week was 2212, against 2161 and 2201 on the two preceding Saturdays; 260 new cases were admitted during the week, against 259, 211, and 229 in the three preceding weeks. Influenza was certified as the primary cause of 24 deaths in London. The deaths referred to diseases of the respiratory organs in London, which had been 257 and 256 in the two preceding weeks, further fell to 240 last week and were 33 below the corrected average. The causes of 45, or 1·2 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in West Ham, Bradford, Leeds, Newcastle-upon-Tyne, and in 14 other smaller towns. The largest proportions of uncertified deaths were registered in Birmingham, Nottingham, Liverpool, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·0 and 16·9 per 1000 in the two preceding weeks, rose again to 19·9 during the week ending June 3rd, and exceeded by 2·2 per 1000 the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 15·5 in Leith and 16·9 in Paisley and in Perth to 20·8 in Aberdeen and 20·9 in Edinburgh. The 607 deaths in these towns included 17 which were referred to diarrhœa, 16 to measles, 16 to whooping-cough, 11 to scarlet fever, five to diphtheria, and three to "fever." In all, 68 deaths resulted from these principal zymotic diseases, against 60 and 52 in the two preceding weeks. These 68 deaths were equal to an annual rate of 2·2 per 1000, which was 0·4 above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of measles, which had declined from 27 to 11 in the three preceding weeks, rose again to 16 last week, of which 12 occurred in Glasgow and three in Edinburgh. The 16 deaths referred to whooping-cough were within one of the number recorded in the preceding week, and included seven in Glasgow, six in Edinburgh, and three in Leith. The fatal cases of scarlet fever, which had been eight and three in the two preceding weeks, rose again to 11 last week, of which six occurred in Glasgow, three in Paisley, and two in Edinburgh. The deaths from diphtheria, which had declined from six to one in the three preceding weeks, rose again to five last week, and included two in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 103 and 80 in the two preceding weeks, rose again to 108 last week, but were 25 below the number in the corresponding period of last year. The causes of 41, or nearly 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 26·8 and 26·5 per 1000 in the two preceding weeks, further declined to 22·1 during the week ending June 3rd. During the past four weeks the death-rate in the city has averaged 25·5 per 1000, the rate during the same period being 16·4 in London and 17·9 in Edinburgh. The 148 deaths registered in Dublin during the week under notice showed a decline of 30 from the number in the preceding week, and included five which were referred to the principal zymotic diseases, against seven in each of the two preceding weeks; of these two resulted from whooping-cough, one from measles, one from scarlet fever, and one from diarrhœa, but not one either from small-pox, diphtheria, or "fever." These five deaths were equal to a rate of 0·7 per 1000, the zymotic death-rate during the same period being 1·7 in London and 2·3 in Edinburgh. The fatal cases of whooping-cough, which had been three and one in the two preceding weeks, rose again to two last week. The mortality from measles corresponded with that recorded in the preceding week. The 148 deaths in Dublin last week included 24 of infants under one year of age and 34 of persons aged upwards of 60 years; the deaths both of infants and of elderly persons showed a decline from those recorded in recent weeks. Six inquest cases and nine deaths from violence were registered; and 56, or more than a third, of the deaths occurred in public institutions. The causes of seven, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

STAFF SURGEON R. E. BIDDULPH is appointed to the *Duke of Wellington*. Staff Surgeon Herbert E. Marsh of the *Prince George* has retired in consequence of ill-health. Surgeons: A. Gaskell to the *Vivid*; R. L. Price and E. S. Tuck to the Hong-Kong Hospital; T. C. Meikle to the *Linnet*; and H. S. Burniston to the *Esk*.

ROYAL ARMY MEDICAL CORPS.

Major C. H. Burtchaell joins at Woolwich and Major E. Eckersley is ordered to London for duty. Colonel W. F. Stevenson is granted a three years' extension of his appointment as Professor of Clinical and Military Surgery at the Royal Army Medical School, Netley.

YEOMANRY CAVALRY.

Suffolk (the Duke of York's Own Loyal Suffolk Hussars): Surgeon-Captain H. C. Martin resigns his commission; Alfred Cooper, late Surgeon and Honorary Surgeon-Major, 14th Middlesex Volunteer Rifle Corps, to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Artillery: 1st Cornwall (Duke of Cornwall's) (Western Division Royal Artillery): Surgeon-Lieutenant R. T. Cann resigns his commission. Surgeon-Lieutenant C. C. Bullmore, from the 1st Volunteer Battalion the Duke of Cornwall's Light Infantry, to be Surgeon-Captain. *Royal Engineers:* 1st Northamptonshire: Surgeon-Captain W. Easby resigns his commission. *Rifle:* 2nd Volunteer Battalion the Prince of Wales's Own (West Yorkshire Regiment): Henry Mitchell, late Surgeon-Major, Royal Horse Guards, to be Major. 2nd Volunteer Battalion the Royal Welsh Fusiliers: William Owen Evans to be Surgeon-Lieutenant. 2nd Volunteer Battalion the Durham Light Infantry: George Stephen to be Surgeon-Lieutenant. 2nd Volunteer Battalion the East Surrey Regiment: Surgeon-Major W. Gandy to be Surgeon-Lieutenant-Colonel.

INOCULATION FOR ENTERIC FEVER.

In our issue of May 27th we announced that the War Office has decided that soldiers proceeding to military stations abroad where enteric fever is prevalent shall be given the opportunity, should they care to avail themselves of it, of inoculation against that disease. The operation is entirely a voluntary matter as far as the soldiers are concerned. Professor Wright of Netley, as the outcome of experimental investigations into the subject, considers that such inoculations exercise a protective influence against the disease and, as our readers are aware, when in India as a member of the Plague Commission he addressed some remarks, with the permission of the military authorities there, to the men of some British regiments serving in India. Considering the scourge which enteric fever is to the young soldiers of our army serving in hot climates and the susceptibility of new-comers to be attacked by it Professor

Wright will have rendered the army and the public generally a great service should his views prove to be correct when they have been tested by experimental trial on an adequate scale.

THE PHILIPPINE WAR.

According to the latest accounts the rainy season is not to be allowed to interfere with the military operations in the Philippines; they are to be actively continued unless and until they prove impossible. The situation at the present time seems uncertain and not altogether satisfactory. A recent despatch from Manila reports the return of some hospital tugs with 500 wounded and heat-stricken troops from General Lawton's force, together with the news that the fighting had been very severe. The Americans will have to send strong reinforcements if active operations on any adequate scale are to be carried on. It is said that local reports represent that the conditions during the rainy season of last year offered no insuperable obstacle to a campaign.

BIRTHDAY HONOURS FOR THE SERVICES.

The list of Birthday honours includes the names of Surgeon-General A. A. Gore, late Principal Medical Officer in India, who has been made a Companion of the Bath, and Lieutenant-Colonel W. G. King, Indian Medical Service, who has received a Companionship of the Order of the Indian Empire. The decoration of the Red Cross has been conferred upon Miss Isabella Smith, R.N.N.S., in recognition of her devotion and competency in connexion with her nursing duties in naval hospitals at home and abroad and during the Benin Expedition.

The London Companies Volunteer Medical Staff Corps will parade and attend the service at St. Paul's Cathedral at 10 A.M. on Hospital Sunday.

Correspondence.

"Audi alteram partem."

THE METROPOLITAN HOSPITAL SUNDAY FUND.

To the Editors of THE LANCET.

SIRS,—Next Sunday is "Hospital Sunday" and as President of the Fund I desire by your courtesy to make the customary appeal for the support and coöperation of the benevolent public on this interesting anniversary. The movement was started at the Mansion House in 1873 and if £50,000 is raised this year no less than a million sterling will have been distributed through its instrumentality among the hospitals and dispensaries of the metropolis. The Council are naturally anxious that this million should be reached and as over 1800 congregations have undertaken to devote their offertories on Hospital Sunday to the Fund there is ground for hope that the balance will be raised. Towards this result Mr. George Herring has generously made the splendid contribution of £10,000 in a letter which I append. Never were the claims of the medical charities more numerous or more urgent. No fewer than 140 hospitals and 55 dispensaries are seeking awards from this year's collection. None of these are sufficiently endowed to meet their liabilities; most have no endowment at all. Many are in considerable debt and anxiety through meeting the pressing wants of the sick poor of London. The hospitals, it should be remembered, are the training schools of the medical profession and for that reason, too, deserve grateful recognition and adequate support.

While the population of London is, I am informed, increasing out of all proportion to its hospital accommodation the income of the institutions is not only non-progressive but has actually fallen in comparison with the enhanced burden they have to bear. This may partly arise through the detachment of the rich and well-to-do from residence in London and their removal to the easily accessible parts of the home counties, to whose local charities their money is diverted, and partly to the conversion of old and wealthy firms and businesses in the metropolis into limited liability companies with no power to contribute from their corporate income to purposes of charity. However this may be, there is no improvement commensurate with the increase of the population in the funds for the relief of the sick poor.

I cannot, I think, do better than conclude my appeal with the words in which THE LANCET forcibly sums up the situation:—

> The hospitals of London do noble work; the amount done by them is out of all proportion to their revenues; their slender incomes, being derived mainly from fortuitous charity, are precarious and liable to fluctuations; London, the city of untold wealth, should be able to furnish not only adequate but regular hospital accommodation for its suffering poor; Hospital Sunday provides the inhabitants of the metropolis with a regular and annual opportunity of showing their appreciation of the splendid work done by these medical charities. Give of your wealth and give of your poverty; give of your gratitude for benefits received from medical service and give of your gladness that you have been spared from sickness; give for love of man and give for love of God. To all orders of mind, to all social grades, and to all creeds alike the Metropolitan Hospital Sunday Fund must appear as a noble charity, splendidly directed, economically managed, and equitably administered.

I shall be happy to receive at the Mansion House, as usual, the donations of those who may be prevented from contributing through their church or chapel offertories or of those who, interested in the wealth and prosperity of London, live in districts where no collections for the Fund are made.

I am, Sirs, yours faithfully,
JOHN VOCE MOORE, Lord Mayor.

Mansion House, London, June 5th, 1899.

[COPY.]

DEAR SIR,—I enclose my cheque for ten thousand pounds (£10,000) in aid of the Metropolitan Hospital Sunday Fund.

In doing so I wish to bear testimony to the excellent method you adopt in immediately distributing the money collected, and I sincerely hope that the amount received this year will be so greatly increased as to enable you to relieve many of the unendowed charities from their pressing necessities.

Yours truly,
GEORGE HERRING.

"FEES TO MEDICAL WITNESSES AT ASSIZES AND SESSIONS."

To the Editors of THE LANCET.

SIRS,—With reference to the leading article in THE LANCET of May 6th (p. 1237) relative to the allowances to medical witnesses attending law-courts in criminal cases permit me to give you my own recent experience. A few days ago I received a summons to attend at the North London Sessions Court at Clerkenwell, London, to give evidence as to the mental condition of a prisoner, any failure to appear involving serious pecuniary consequences. The carrying out of this necessitated my leaving home the day before the trial and although by great good luck the case came on so early that I was able to reach home late at night on the second day, I was virtually absent from my own work two days. For this I received two guineas and third-class railway fare from Lincoln to London, out of which I was supposed to pay my hotel bill and cab fares, losing, of course, my usual professional earnings at home. Remonstrating on being allowed only third-class railway fare I was informed that when there were no second-class carriages medical witnesses were only allowed third-class fare. I need only remark that I returned home a poorer man after performing a public duty than before leaving.—I am, Sirs, yours faithfully,

Lindum Holme, Lincoln. GEORGE MITCHINSON.

SUGGESTIONS FOR THE AMENDMENT OF THE RECENT VACCINATION ACT.

To the Editors of THE LANCET.

SIRS,—The recent Vaccination Act is now upon its trial and it must appear already to many public vaccinators cumbrous and difficult in working. The duty of calling and apparently soliciting that children shall be vaccinated ought not to be imposed upon professional men. It tends to lower the already unfavourable opinion of the British public as to the status of medical practitioners. Not infrequently an empty house or a fresh tenant renders the visit useless. The excuse is made that nothing was known of the four months' limit, and in many cases vaccination is declined, either with thanks or with language more or less unpleasant. These uncertainties render the work troublesome and difficult. In the present state of public feeling compulsion is doomed and the "conscience clause" with the four months' limit will

cause endless complications. Whether with a majority of the people in its favour compulsion can be ethically maintained is a question which is open to argument, but with a majority on the other side it is hopeless.

The question is—What is the remedy? and at present "force is no remedy." In a matter of this kind Englishmen abhor compulsion as nature abhors a vacuum. The people may be educated into appreciating the benefits of vaccination but they will not be driven to it. The case for vaccination should be brought to the notice of every parent on the registration of a birth. Vaccination should be free and easily obtainable, with present conditions as to lymph and operation; and the duty of ascertaining whether vaccination is desired by the public vaccinator might be entrusted to the vaccination officer. If this were done the four months' limit might be done away with and the allowance of vaccination of children by parents would be practically voluntary. Indirect compulsion for the protection of private or public interests would still continue and, like indirect taxation, would be little felt.

I am, Sirs, yours faithfully,

Loughborough, May 30th, 1899. J. B. PIKE.

"PLAGUE IN BOMBAY."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of April 22nd (p. 1115) there appears under the heading of "Plague in Bombay" a review of the report of the Austrian Plague Commission. Whilst I am deeply sensible to the gratitude expressed by the commission for the help I gave them I cannot in justice to myself and to the institution I control allow some statements which appear therein to go unchallenged. But inasmuch as the writer—the late lamented Dr. H. F. Müller—is no longer alive, I shall refrain from all personal allusions and confine myself to *facts* in dealing with his statements. Dr. Müller says: "It was not customary at this hospital to use percussion or the stethoscope, and as we did so, we seemed to incur the charge of unnecessary cruelty to the patients; we could not therefore rely on the nursing staff for assistance in this matter." This statement, you will allow me to state, is quite erroneous, to use no harsher term. The patients never objected to percussion or auscultation as practised by us, but they, their friends, and the nurses were not used to the somewhat violent and anything but tender or gentle ways and modes of practice of continental physicians. Dr. Müller's manner and method of examination were disliked by all because of their roughness and because he would in all cases and without the least regard to the feelings of the patients or their friends assist in thoroughly examining them even when moribund or semi-moribund. It is true he was carried away by the excess of zeal in the study of plague and did it with the best intentions, but to him a plague patient was not a *man* but an *interesting case* for study and hence it was that there were frequent squabbles between him and the nurses and I had had often to intervene in order to pour oil on the troubled waters and thus smooth away difficulties. Unfortunately Dr. Müller had a quick, hasty, and irritable temper and used to take offence when none was meant and this was intensified by his want of proper knowledge of English. My position was therefore very delicate, as on the one hand I had to give him all the assistance I could and on the other to see that the patients' friends were not dissatisfied or grumbling about his ways. It was indeed a happy relief to me when all these disputes ceased and Dr. Müller had finished his examinations.

As regards the examination of urine, &c., Dr. Müller had daily examinations of several specimens and even after his return to Vienna I had forwarded to him several samples of urine properly preserved according to his directions.

All the cause of soreness on his part was attributed partly to the above facts and partly to his idea that although we had studied over 1000 cases of plague before he came on the scene in Bombay we knew nothing about it. You were kind enough to review my report on plague in 1898 and as I had published plague work *before* his *report* was out he felt somewhat disappointed and claimed priority in certain matters which I would not admit and hence all this bitterness.

As regards the defects in the post-mortem room, &c., you will no doubt admit that to gentlemen fresh from Vienna with laboratories and post-mortem rooms replete with all modern appliances our hastily improvised arrangements must have appeared crude, but such as they were they were placed at their entire disposal and that with all the difficulties that they mention they were able to do so much shows that they could not have been very serious. The Austrian Commissioners never realised our difficulties in dealing with the patients and their friends and their strong and deep-rooted prejudice towards hospitals and to anything like interference with their dead. It was at times as much as my personal safety was worth to get them a body for post-mortem examination, and there were frequent threats of assault on me and my staff and on the post-mortem room. And having assisted them in the way I did, it was scarcely generous of the commission to flaunt before the professional world some small inconveniences they had to put up with.

This is all that I need say on the subject. Our difficulties you have already realised and some of them I have already described in my report. You may make what use you like of this letter and publish as much of it as you consider proper. I have been compelled to enter at length into the subject as otherwise you would not have been able to fully gauge the meaning of a short reply.

I am, Sirs, yours faithfully,

A. H. CHOKSY,

Khan Bahadur; Chevalier of the Crown of Italy; Medical Officer in charge, Arthur-road Hospital, Bombay.

May 20th, 1899.

"THE PATHOLOGY OF THE PERICARDIUM."

To the Editors of THE LANCET.

SIRS,—The point raised by your correspondents Dr. Harry Campbell and Mr. Barnard as to the mode of breathing in runners is one of great importance, especially to those who are interested in the subject of respiratory exercises. Dr. Campbell maintains that expirations during running are necessarily incomplete, while Mr. Barnard says that "in a well trained cross-country runner whose heart and respiratory pump are efficient for the exercise he undertakes inspirations are profound and expirations complete." I am disposed to differ from Mr. Barnard in this statement for the following reasons. In running the chest is held in an inspiratory phase—that is to say, the dorsal spine is kept extended and the shoulders are braced back; this position gives the best *point d'appui* for swinging the arms freely to and fro. All long-distance runners whom I know make use of this position and I have frequently observed it while running with harriers.

For a long time past I have been making observations with the spirometer on singers and speakers and also on runners, and I have found that when the "expirations are complete," as Mr. Barnard says they should be, the whole position is the reverse of that described above. The dorsal spine is flexed—that is, it is in an expiratory position—and the shoulders and arms are brought well forward so as to decrease the antero-posterior diameter of the chest as much as possible and the chest is collapsed. I have never yet seen this position assumed during running.

I am, Sirs, yours faithfully,

Harley-street, W., June 6th, 1899. GEORGE CATHCART.

LECTURESHIPS ON "TRADE DISEASES."

To the Editors of THE LANCET.

SIRS,—We are having schools of instruction in "tropical diseases" established in London and Liverpool, while lectureships on that subject have been instituted in Edinburgh and elsewhere. All this is very satisfactory. As a maritime and colonising people and as the holders of tropical possessions it is essential that our medical men should have every facility for acquiring a practical knowledge of the maladies prevalent in hot countries. But while congratulating ourselves on this important step which has so direct a bearing on our interests abroad I think it would be well to give some attention also to a matter which lies nearer home. I refer to the providing of instruction in regard to diseases arising from, or aggravated by, the industrial pursuits of our British people. We are a maritime people and a colonising power but we are also, and first of all, a manufacturing people. Our position in the world—our wealth and our power—essentially depend on our skill and capacity as manufacturers. Our possessions abroad afford markets for our goods, and our ships convey them thither; but at the root of all lies the making of these goods.

And therefore the health and well-being of those engaged in industrial pursuits is to us as a nation a matter of prime importance. So far as I am aware there is no lectureship or special course of instruction given on "trade diseases" in this country. I am aware that the subject falls under the heading of "Hygiene" and that it is dealt with as a part of "public health," and it may be argued that this is provision enough. I do not think so. As well may it be contended that "tropical diseases" fall under the heading of "Practice of Medicine" and that therefore special courses on that subject are unnecessary.

My proposal is that special lectureships on "trade diseases" should be instituted at the medical schools in our large manufacturing towns and that these lectures should be illustrated and supplemented by visits to factories and public works. These visits would afford valuable object-lessons to the young students of Æsculapius, not only contributing to their medical education, but widening and deepening their knowledge of the life conditions of the labouring classes and giving them some idea of the wonderful skill and energy which have placed us where we are as a nation. I must cut this letter short as I have already encroached too much on your space. Hoping that the subject may be taken up,

I am, Sirs, yours faithfully,

JAMES W. ALLAN, M.B. Glasg.,
Dispensary Physician, Glasgow Royal Infirmary.

Glasgow, June 5th, 1899.

THE INCUBATION PERIOD OF CHICKEN POX.

To the Editors of THE LANCET.

SIRS,—I was recently asked to attend some children who were "broken out all over." On examination I found that they were all suffering from varicella as was a *seven-day-old infant*, who had a good crop of typical chicken-pox vesicles. The case of this infant seems to me to be worth recording as an instance of varicella where the incubation period could not possibly have been more than seven days. From 10 days to a fortnight is the period given by most authorities.—I am, Sirs, yours faithfully,

C. L. BIRMINGHAM, M.D. R.U.I.

Gatcombe-road, Tufnell-park, London, N., June 5th, 1899.

THE VICE-PRESIDENCY OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND.

To the Editors of THE LANCET.

SIRS,—Inasmuch as there was no change in the office of President or Vice-President this June election which took place to-day, I desire to inform the Fellows of the College that last year when I expressed to the electors my determination to offer myself for the office of Vice-President I felt that my long service to the School and College as senior demonstrator, examiner, and councillor, and my seniority as a surgical teacher and as a hospital surgeon, might reasonably deserve recognition by the Fellows, and that I might hope to be honoured with election to the office I then sought. Unhappily, personal and domestic circumstances prevented me from giving prominence to my candidature until others had occupied the ground in some degree, and as a contest is extremely distasteful to me and in my opinion is not to the advantage of the College I thought it best to refrain from presenting myself for the vice-chair until the next legitimate vacancy occurs in June, 1900. I desire, however, to assure the Fellows that under any circumstances I shall do so when that time arrives. With this intimation I trust that my friends and supporters among the Fellows will not be induced to pledge their votes to any other candidate for the next Vice-Presidency.—I am, Sirs, yours faithfully,

L. H. ORMSBY, M.D. Dub., F.R.C.S. Irel.

Merrion-square, Dublin, June 5th, 1899.

THE ACCURACY OF THE MEDICAL REGISTER.

To the Editors of THE LANCET.

SIRS,—Your annotation in THE LANCET of June 3rd (p. 1503) headed "Sir George Pilkington, M.P., and the Medical Register," interests me. I had occasion some years ago to change my name (omission of two superfluous Christian names) by deed poll registered in the High Court of Justice. The officials of the Royal College of Surgeons and the Apothecaries' Company at once complied with my request to make the correction in their official lists, but the General Council of Medical Education and Registration refused to make the necessary alteration till I paid them a small fee, which I did under protest. This, no doubt, explains the omission you refer to in the case of Sir George Pilkington. I am, Sirs, yours faithfully,

June 3rd, 1899. F.R.C.S. ENG. AND L.S.A.

THE INTERNATIONAL CONGRESS ON TUBERCULOSIS AT BERLIN.

(FROM OUR BERLIN CORRESPONDENT.)

(Concluded from p. 1517.)

THIRD DAY.

Curability of Tuberculosis.

PROFESSOR CURSCHMANN (Leipsic) said that cases might be regarded as cured when the tuberculous infiltration had no tendency to exacerbation, when there was no extension of the morbid process to other parts of the lungs, and when the general state of the patient continued to be good. These conditions were not infrequently fulfilled, and a still greater number of patients were relatively cured, the local process continuing, but the patients nevertheless feeling quite well and being able to work. No reliable statistics could be given as to the percentage of cases cured. The modern dietetic and hygienic treatment had given the best results. No real specific remedy had yet been discovered. The cases where tuberculosis was still in the first stage had the best chances of being cured and early diagnosis was thus very important. The so-called "latent" forms must be specially kept in view. The influence of climatic conditions was not so great as had been believed and "immune zones" did not exist. Persons whose social circumstances were propitious and those who were no longer young had the best prospects of recovery. Predisposition to tuberculosis might be hereditary.

Professor Koch's Tuberculin.

Professor BRIEGER stated that an unwarranted pessimism had succeeded the enthusiasm with which Professor Koch's discovery was at first received. It was nevertheless undeniable that tuberculin had a specific action and that it enabled a diagnosis to be made of doubtful cases, but in advanced cases the tuberculin test failed because the organism was already saturated with tuberculin. The majority of medical men were now opposed to the use of the tuberculin test, as they were afraid of accidents which might, however, be easily avoided. Tuberculin was, moreover a specific remedy for tuberculosis, acting exclusively on the tuberculous process and being without any influence on the complications. Uncomplicated tuberculosis in the first stage might sometimes be cured by the administration of tuberculin, and cases in a more advanced stage, where tuberculosis was combined with other pathological alterations, might be improved. A good deal of experience was necessary for the selection of cases fit for the tuberculin treatment. In sanatoria tuberculin ought to be used together with the other methods of treatment.

The Climatic Treatment of Tuberculosis.

Sir HERMANN WEBER (London) was explicit in stating that it was useless for a patient merely to reside at a health resort without being at the same time under medical supervision. For the majority of patients, especially for those of the poorer classes, the treatment in sanatoria was preferable. Speaking of the selection of a health resort he said that patients in whom the progress of the tuberculosis was slow ought to seek a warm climate; if tuberculosis was combined with diabetes places with a dry and warm climate were preferable. Cases with severe catarrh must be sent to sheltered places; patients whose constitution was relatively strong would benefit from residence in high altitudes or from sea-voyages. The houses occupied by the patients should stand on a dry site and should be exposed to the sun; they must also be sheltered from cold winds and dust. Patients at health resorts must on no account fatigue themselves at games or social entertainments, and for this reason among

others they ought to be under the care of local physicians. In every climate pulmonary tuberculosis was curable at the onset and the multiplication of sanatoria was strongly to be recommended.

Treatment of Tuberculosis by Drugs.

Professor KOBERT (Rostock) said that the physician could not do without the administration of drugs in advanced cases where hygienic treatment was no longer available. Sedatives, antipyretics, tonics, &c., must be prescribed according to the requirements of individual patients. In local tuberculosis of the bones, joints, and skin iodoform was very useful. Creasote was to be recommended in the later stages together with injections of camphorated oil. The results said to have been obtained with ichthyol, cinnamic acid, and Peruvian balsam required further verification.—Dr. VON SCHROTTER (Vienna) showed two patients who had been operated on for laryngeal tuberculosis 13 and nine years ago respectively and who were permanently cured.—Dr. J. G. SINCLAIR COGHILL[1] (Ventnor) spoke of the hygienic and dietetic treatment followed in England and Dr. DETTWEILER, physician to the Falkenstein Sanatorium, on the open-air treatment.—Professor LANDERER read a paper on treatment by cinnamic acid.

FOURTH DAY.

The Congress on this day took into consideration the subject of sanatoria for the wage-earning and the poorer classes. A great many delegates from the sick clubs and trade unions of Germany attended, and were received in terms of welcome by the Chairman, Dr. Gaebel, President of the Imperial Insurance Office.

The Origin and Maintenance of Sanatoria.

Professor VON LEYDEN stated that the first sanatorium for the poor was established in England as early as 1814. Nowadays sanatoria existed in nearly every country of Europe and in America. In Germany the first endeavours to establish sanatoria were made in 1882, especially by the Verein für Innere Medicin. There were at present 31 sanatoria in Germany for the benefit of the working-classes.—Herr MEYER (Berlin) then read a paper on sanatoria from the financial point of view. He argued that they ought to be supported by sick clubs, by employers' associations, and by the State.

Phthisis among the Working Classes.

Dr. R. FRIEDEBERG, the delegate of the Berlin Industrial Sick Clubs, was of opinion that tuberculosis was peculiarly a disease of working people as every second member of the clubs died from this cause. The working classes appreciated the efforts of the Government and the charitable associations in combating the disease but they believed that matters would not improve until better social conditions prevailed. The medical officers to the sick clubs ought to be authorised to send phthisical patients to sanatoria in an early stage while a cure was still possible. The nature of the disease and the methods of preventing it ought to be explained to working people by medical men reading papers at club meetings and by pamphlets written in popular language, and the inspectors of factories ought also to have a watchful eye on their hygienic conditions.

Provision for the Families of Phthisical Subjects.

Dr. PANNWITZ said that systematic arrangements ought to be made for maintaining the families of phthisical workmen. Working men were apt to come to the sanatoria too late and to take their discharge too soon because they were afraid of leaving their families in distress. A good deal of charitable work might be done by the Red Cross Association in relieving their families; and the future of those who had left sanatoria either cured or improved also invited attention. Whilst staying in the sanatoria the patients must be helped to find employment perhaps more suitable for their health. Dr. Pannwitz recommended the establishment of farms where the patients after having left the sanatoria might stay for a certain time and be employed in agricultural work.

Dr. RUFENACHT WALTERS (London) described the sanatoria in Great Britain, mentioning that in England the open-air treatment had been in use a long time before Dr. Brehmer established the first sanatorium in Germany.

Professor BAGINSKY advocated the establishment of special sanatoria for children.

Dr. WEICKERS (Görbersdorf) said that he had inquired into the state of health of the patients after they had left the sanatorium. He had found that of those who had come for treatment in the beginning of the disease more than 95 per cent. remained in good health for more than four years. Patients with very advanced tuberculosis were unsuitable for sanatorium treatment. It was an act of unwise sentimentality for a medical man to send such cases to sanatoria where they disturbed the other patients without deriving any benefit themselves. It had been ascertained by statistical research that the life of these patients was not prolonged by residence in a sanatorium.—Professor BROUARDEL (Paris) expressed approval of the opinions held by Dr. Weickers.

Papers were also read before the Congress by Professor EWALD, on Sanatoria at the Seaside; by Dr. HOBE, on Sanatoria for the Middle Classes; by the Spanish delegate, Dr. JOSÉ JUAN DOMINE, on the Spanish National Sanatorium in Porta-coeli; by Dr. VAUGHAN on Sanatoria in England; and by Dr. MOHARREM BEY (Cairo) on International Sanatoria. The Congress was closed on Saturday, May 27th, by the honorary president, the Duke of Ratibor. Professor BROUARDEL expressed the thanks of the foreign delegates to the committee.

The members of the Congress were shown over the sanatorium of the Red Cross Association at the Grabow-See, near Berlin, and the sanatoria in Belzig and Blankenburg. The committee and the foreign delegates, including Sir Thomas Grainger Stewart and Sir Hermann Weber, were received by the Emperor and Empress at Potsdam.

[1] Dr. Coghill's paper was published at length in THE LANCET of June 3rd. We regret to learn that Dr. Coghill died shortly after his return to England. An obituary notice will be found on page 1588.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

Captain Leumann's Report on Inoculation for Plague in Hubli.—The Decline of Plague throughout India.—Plague in Mauritius.

THE town of Hubli has perhaps afforded the best test for the value of inoculation in plague and the report of Captain Leumann, I.M.S., is so exhaustive that we have in it one of the fullest records of plague administration and of the efficacy of inoculation. General sanitary measures were adopted and isolation of the sick with segregation of contacts and evacuation of infected dwellings were also carried out, but—and here is the difference—inoculation was given a full opportunity by the concessions which were granted to those who were twice inoculated. These people were allowed to remain in their homes and to carry on their occupations. The consequence of this policy was that the natives inundated the inoculation stations clamouring for the operation. They moreover saw that persons inoculated almost entirely escaped the disease while those non-inoculated suffered severely. From May 11th to August 23rd 33,880 persons were inoculated (24,138 twice, 9742 once). In all 58,018 inoculations were performed in 15 weeks, or an average of over 550 a day. Captain Leumann has himself performed 22,000 inoculations and on one day performed over 1000 operations.

The statistics of mortality have all been published before. Suffice it to say that the actual plague deaths have averaged 85 per cent. in favour of the inoculated. Over 95 per cent. of the population of Hubli have now been inoculated. Captain Leumann nevertheless says: "While paying the highest tribute to the value of Mr. Haffkine's inoculation method which I claim here in Hubli to have been put to perhaps the severest test to which it has been subjected I am of opinion that individual protection is, on however great a scale conducted, of less importance to that of general protection by sanitation and hygiene (considering each method separately, that is to say) for it seems to be more radical if not more rational to eradicate a disease than to leave it to pursue its course and only to protect people against its ravages. But I see no reason whatever why the two methods should not be utilised together and as there appear to be various difficulties regarding the proper application of sanitary measures to allow inoculation its fullest scope." Amongst other observations recorded Captain Leumann says that the general health of inoculated persons seems to be improved as shown by the lower death-rate from

"other causes." He has found pustular eczema not only benefited but in some cases cured. Lupus, however, in four cases noted was greatly aggravated, and in undoubted phthisical subjects the cough was aggravated and there was an increase of hectic and of sweats. Two cases of long-standing epilepsy were supposed to have been cured.

Captain Leumann admits that owing to the great difficulties in carrying out sanitary measures inoculation must of necessity come more prominently to the front. He still holds that early notification is the first and most essential factor in dealing with epidemics, but he knows that the natives of India will not notify and records the fact that not more than 20 per cent. of plague cases in Hubli have ever been reported as such before death. He also holds that the removal of plague cases is equally important. The fact that neither of these objects can be accomplished in the face of native apathy or opposition would surely suggest that individual protection by inoculation was a much more important measure during a plague epidemic than any attempt at general sanitary administration. It is necessary to employ segregation and evacuation as an alternative, however, otherwise there would not be sufficient inducement to the native to be inoculated. Great tact seems to have been shown in plague administration generally for at other places where similar opportunities have been offered for the display of administrative capacity the same happy results have not been accomplished. The report is full of most interesting detail and will be a useful guide to the authorities in the Bombay Presidency should plague continue in India after the present season

There were 1133 deaths from plague in India last week. In the Bombay Presidency there were 1084 of which Bombay city accounts for 323 deaths and Karachi city for 181. As the general mortality in Bombay city was more than 500 over the average there Government returns of plague apparently fall far short of the actual truth.

There were only 149 deaths outside the Bombay Presidency. Madras Presidency reports 10, North Arcot four, Salem district five, Mysore State 51, Kolar Goldfields 32, Mysore city 18. The Punjab returns nine and Bengal returns 74, Calcutta contributing 60 and Howrah 14. All other Bengal districts now return clean sheets.

Calcutta shows during the present month a marked decline of plague deaths. Commencing in January with four deaths there was an increase in February to 28 deaths. In March the outbreak seemed to suddenly take on virulence and 426 deaths were recorded. During April there were 499 deaths, but for the first 16 days of May only 134 have been recorded—a very rapid and marked decline. The general death-rate for the past week was 40·0 per 1000 per annum, against 34·3 the mean of the last five years. In the suburbs the death-rate was 38·3 per 1000 per annum, against 40·7, the mean of the last five years. The general death-rate of the combined area is equal to 39·5. The three cities of Karachi, Bombay, and Calcutta all show great improvement in the number of plague deaths.

The Governor of Mauritius reports three fresh cases of plague on May 1st.

May 18th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

The Liverpool Corporation and the Housing of the Working Classes: Demolition of Insanitary Property.

MR. G. W. WILCOCKS, C.E., Local Government Board inspector, recently held an inquiry at the municipal offices with reference to an application of the corporation to borrow a further sum of £50,000 for the demolition of insanitary property and £13,500 for the building of workmen's dwellings. Dr. Hope stated that the property to be dealt with consisted of houses in which sickness was almost always prevalent. Typhus fever, which had been practically eradicated from every other town in England, lingered in the districts included in the presentment. The heavy death-rate of Liverpool was entirely owing to the existence of property of this character. Taking away the insanitary districts it would be found that the rest of the city had a death-rate of under 18 per 1000, whereas in the insanitary districts the death-rate was 40·2 per 1000. In Lace-street district the population was from 800 to 1000 to the acre. The sanitary arrangements were abominable, especially in cases of sickness, bad weather, or the presence of gangs of roughs, when the common convenience at the end of a court could not be used. The Parks Committee had endeavoured to brighten these places by distributing window-boxes, but it was found that owing to the absence of sunlight and air plants would not grow amidst these hovels. The property was ruinous, saturated in the interior with organic filth from generations of inhabitants, and owing to age and neglect nuisances of the grossest character were common. The inspector asked whether the corporation proposed to rebuild at the same time that they demolished, as the Local Government Board felt that more should be done in the direction of re-housing. The Board required that a scheme of demolition should not be undertaken without considering what was to become of the population. Mr. Henderson, one of the city councillors, said that since 1884, when these demolitions began, the destruction of insanitary property had progressed rapidly, but the provision for re-housing had not progressed at anything like the same rate. On that occasion, for example, the corporation were applying for £50,000 to demolish property and only £13,500 to rebuild. In his opinion the figures ought to be reversed. Dr. Hope said that he was in a position to prove that previous demolitions had not resulted in overcrowding sublet houses as stated. In 1894 there were upwards of 20,000 sublet houses on the register supervised by a staff of 11 inspectors, who had been subsequently increased to 13. As a result of stringency and prosecutions the sublet houses had decreased to 17,000 while the cases of overcrowding were fewer.

Sir W. Mitchell Banks, M.D. Edin., LL.D., F.R.C.S. Eng.

The honour of knighthood conferred on Mr. William Mitchell Banks upon the occasion of Her Majesty's birthday has given unqualified satisfaction to the profession in Liverpool. Sir William Mitchell Banks's career has been highly distinguished. He graduated M.D. at the Edinburgh University in 1864, obtaining the gold medal for his thesis on the Wolffian bodies. He subsequently became demonstrator of anatomy at the Glasgow University, where he remained for two years prior to his removal to Liverpool. His ability as a skilful surgeon received early recognition and the profession in that city have since bestowed upon him every honour which it was in their power to give. His first appointment in Liverpool was that of pathologist to the old Royal Infirmary. He also filled the post of lecturer in anatomy in the Royal Infirmary School of Medicine, becoming the first professor of anatomy upon the affiliation of that school to University College in 1881. Sir William Mitchell Banks was amongst the foremost of the founders of the college and to his efforts, in conjunction with those of Dr. Waters and others, was due the rebuilding of the Royal Infirmary which is considered to be one of the finest hospitals in Europe. His appointment as honorary surgeon to the Royal Infirmary, of which he is now the senior surgeon, dates from the year 1877. He has been a member of the Council of the Royal College of Surgeons of England and for some time he represented the Victoria University on the General Medical Council. He filled the office of President of the Liverpool Medical Institution in 1890–91. A few years since the profession in Liverpool presented him with his portrait painted in oils by the Honourable John Collier. He was recently honoured by his *alma mater*, the University of Edinburgh, with the honorary degree of LL.D. His urbanity and kindliness of manner are everywhere recognised and whilst it can be said that his friends are legion it may be safely affirmed that he does not possess an enemy.

Hospital Saturday Fund: Ladies' Street Collection.

The ladies' annual street collection in aid of the Hospital Saturday Fund took place on June 3rd in summer weather. Upwards of 900 ladies, wearing white badges with the inscription "Ladies' Hospital Saturday Fund," devoted themselves to the collection. The committee of the fund have made a new departure by collecting on the day prior to the street collection in offices and business premises where the principals seldom come to the city on Saturdays. Last year's street collection realised £793. Chiefly from the workshops the substantial sum of £3099 has already been received by the treasurer of the Hospital Saturday Fund. This aggregate illustrates the value of systematic contributions.

The Hospital for Cancer and Skin Diseases.

A strong feeling exists amongst the members of the profession that Dr. Taylor and Dr. Whitford have been unjustly

dismissed from their posts at the Cancer and Skin Hospital. The opinion prevails that they should be reinstated. They both alleged that the sub-committee which had inquired into the charges and counter-charges preferred by the medical officers had ignored several important items of evidence, and as this statement, if correct, would imply a certain amount of bias on the part of the sub-committee the matter ought not to be allowed to remain in its present condition.

Presentations to the Medical Officer of Health of Liverpool.

In view of the approaching marriage of Dr. E. W. Hope, the medical officer of health, the members of the Watch Committee of the City Council have presented him with a silver salver of an early Georgian pattern. The presentation was made by the chairman of the Health Committee (Mr. E. H. Cookson) in an appropriate speech. The staff of the Public Health Department of the corporation have also presented Dr. Hope with a massive silver centre-piece of Grecian design. Mr. James Cooper, the chief inspector, was the spokesman on the occasion on behalf of his brother officials.

Liverpool Corporation: Hospital Extension.

Mr. Noel T. Kershaw has intimated the Local Government Board's sanction to the borrowing by the Liverpool Corporation of £3500 for the purchase of land for hospital purposes, £20,000 for the erection of a small-pox hospital, and £40,000 for the extension of the City Hospital East, Mill-lane, Old Swan.

June 6th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

The Prevention of Tuberculosis in Scotland.

A CONFERENCE with respect to the prevention and control of tuberculous diseases took place last week between the Public Health Committee of Aberdeen Town Council and a deputation from the Aberdeen, Kincardine, and Banff Branch of the British Medical Association. Among the representatives of the former were Dr. John Robertson, convener, and Dr. A. T. Gordon Beveridge, together with Dr. Hay, medical officer of health of the city. The deputation from the British Medical Association consisted of Professor Finlay (branch president), Professor Stephenson, Dr. Scott Riddell, Dr. A. T. Milne, and Dr. Edmond. Dr. Hay's memorandum, of which a summary lately appeared in THE LANCET, having been considered, the medical men present approved of a regular inspection of dairies, the application of the tuberculin test, and the employment of a veterinary surgeon as inspector. These steps would, in their opinion, render sterilisation of milk unnecessary. As to meat-supply, they were in favour of a municipal slaughter-house. With regard to the proposed sanatorium (in the country) for phthisical patients they were strongly in favour of the idea being carried out either at the expense of the rates or by voluntary subscription. On the suggestion of the deputation it was agreed to hold a conference with the directors of the Aberdeen Dispensary, the managers of the Royal Infirmary, and the Aberdeen Parish Council with a view to a practical scheme being framed.

Aberdeen Royal Infirmary.

The month's house-to-house collection on behalf of this hospital, organised by the executive of the Hospital Saturday Committee in Aberdeen, has produced rather more than £500—a result which has disappointed expectations. The proposed demonstration on behalf of the hospitals in the city has been postponed to August 11th and 12th next so as to permit of the attendance of a detachment of the New South Wales Lancers.

Aberdeen University Volunteer Medical Staff Corps.

This corps went into camp at Charleston Park, Aboyne, near Aboyne Castle, the residence of the Marquis of Huntly, Lord Rector of the University, on the evening of June 1st. The annual inspection took place on the ground and the camp broke up on the 5th. The weather was favourable and camp life was greatly enjoyed by the students.

June 6th.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

The Royal Victoria Hospital, Belfast.

AT a meeting of the Executive Committee held on May 31st the plans for the new Belfast Royal Victoria Hospital were presented and unanimously passed. These maturer plans have been most carefully worked out by the architect, Mr. Herman (who designed the Birmingham Hospital), in conjunction with the hospital staff and the construction committee. They provide for about 300 beds in 19 wards, generally of 16 beds each, with the necessary accessory rooms, including a certain number of single wards, all of which are situated on one floor-level, thereby avoiding both staircases and lifts, in addition to which there is the extern department consisting of a large waiting-hall surrounded by a number of consulting- and retiring-rooms. Adjoining this is the pathological department, all on the same floor-level. The principal entrance is near the centre of the site on the Grosvenor-street side, past a porter's lodge, to an open courtyard, around which on three sides are arranged the administrative departments, a spacious entrance-hall being in the centre. On one side provision is made for the medical and surgical resident staff; on the other are sitting-rooms for the nursing staff with bedrooms above. On the south side is a wide corridor running the full length of the building, by which all accommodation for patients can be approached. A large lecture theatre and suitable accommodation for students are also provided. In addition to the facilities in administration secured by having all wards and rooms for patients on one floor-level the arrangement is particularly adapted for simplifying the application of the plenum system of ventilation which the committee have decided to adopt. The materials to be employed for the exterior have been selected with a view to produce a pleasing effect of colour—grey sand-faced red brick and terra-cotta for the walls, green slates for the roofs, and lead on the small-domed ventilating turrets.

Drumbeg Dispensary District.

Mr. Munce has been elected medical officer of the Drumbeg Dispensary District of the Lisburn Union.

Salary of an Analyst.

The guardians of Newtownards, county Down, are advertising for a trained nurse and an analyst, the salary in the former case being £40 per annum, while in the latter candidates are required to state what sum they expect "for making an analysis of about 100 samples of medicine."

Portstewart Dispensary.

I am glad to know that the Local Government Board have declined to give their sanction to the miserable salary of £60 per annum proposed to be paid by the Coleraine Guardians to the Portstewart Dispensary medical officer on the ground that it was inadequate remuneration for the duties to be discharged. By a majority the guardians have now agreed to pay £75.

June 6th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Artificial Stimulation of Glands by Raising their Temperature.

AT the meeting of the Society of Biology held on May 20th M. Lépine recounted some experiments which he had performed. He had found in the case of a dog the abdomen of which he had opened that if the spleen were lifted out and placed in a capsule so that it could be surrounded by water at a temperature of from 40° to 50° C., the injection of a dose of typhoid fever toxin which proved fatal to another dog under ordinary conditions was easily resisted by the dog experimented upon. Hence he considered that this treatment of the spleen produced an increased quantity of antitoxin. At the same time he found that the blood of the splenic vein contained less sugar than that of the carotid artery. If the warming of the spleen was continued for two hours the proportion of sugar remained the same. But if the pancreas was warmed in the same way for two hours and its nerves stimulated the

quantity of sugar in the arterial blood fell rapidly, showing that the action of the pancreas is to promote glycolysis. It acts both by its internal secretion and by destroying substances which exert an inhibiting influence upon glycolysis. Hence it is plain that the taking of pancreatic substance by ingestion in diabetes does no good because the gland is taken as a dead substance, but, on the other hand, if a portion of pancreas be transplanted under the skin and so remains and acts as a living organ, it is reasonable to expect it to exert a favourable influence.

Edible Locusts.

At a recent meeting of the Pharmacy Society M. Marty showed on behalf of M. Roeser, a pharmaceutical chemist at Tunis, some specimens of locusts prepared as food by the natives. M. Roeser sent with these an account of the method of preparation and pointed out that according to his estimation of the nitrogenous, fatty, and saline matters in this diet it was obvious that the poor people who were the general consumers of it were in possession of a food product having a very real value.

M. Brouardel on the Plague.

M. Brouardel, who is Dean of the Faculty of Medicine and President of the Committee of Hygiene, has communicated some opinions to a journalist upon the chances of the plague spreading to France. M. Brouardel considers that if the plague should arrive in Europe the devastation wrought by it would be widespread, for many small ports, to say nothing of more populous towns in which old districts exist, are in a deplorable sanitary condition and would constitute so many centres for the propagation of the plague which it would be most difficult to destroy. He thinks, however, that it will not be easy for the scourge to spread to France by way of the sea on account of the strict quarantine regulations imposed upon all vessels coming from suspected ports. At Marseilles, for instance, the lazaretto of Frioul[1] is admirably organised and has power to exercise the most strict surveillance over both goods and passengers, so that fear of the spread of the infection by this route may practically be disregarded. In M. Brouardel's opinion the great danger lies in the risk of transmission by land and if, for example, the plague should invade Turkey it would be almost certain to spread, for in that country it is next door to impossible to carry out any sanitary measures.

Foreign Students in Paris.

The Education Minister has just issued the statistical report of students in the various faculties up to Jan. 15th, 1899. In the Faculty of Medicine there are 7758 students, of whom 4072 belong to the Faculty of Paris. The foreign students number 700, of whom 88 are women. Since the promulgation of the new regulations which forbid foreigners the right to practise medicine in France, even should they have studied in a French faculty, the number of foreign students has been diminishing. While on this subject I feel that I must give some information which will be important to those English students and medical men who so often apply to THE LANCET for information as to the practicability of gaining a livelihood by the practice of their profession in France. A medical man or a medical student especially if he has not an absolutely perfect knowledge of French could not possibly support himself here solely by making use of his medical knowledge. Practice is forbidden to the qualified man by the French regulations on the matter; he may not even attend his own countrymen when ill. In addition, the number of practitioners who are in possession under former regulations of the right to practise is greatly in excess of the requirements of the foreign colony. As for a student, the only post he can hope for is that of secretary or assistant in a private clinic and even these posts are as a rule unpaid or only paid at a very low rate. Most French medical men who occupy themselves chiefly with scientific work can read English scientific treatises perfectly well and even if they cannot do so there are plenty of Russian students available who are very poor, who have a perfect acquaintance with three or four languages, and who give their services at a very low price. Even of these the supply exceeds the demand.

Obituary.

Dr. Louis Alphonse Charpentier, Professor and Fellow of the Faculty of Medicine, Paris, died on May 29th, aged 63 years. He was a member of the Academy of Medicine and was born in Paris in 1836. He took the degree of Doctor of Medicine in 1863 and was appointed head of the Obstetrical Clinic in 1869 and a Fellow and Professor at the Faculty of Medicine in 1872. On Nov. 25th, 1884, he was elected a member of the Academy of Medicine and was made a Knight of the Legion of Honour in 1887. He was very successful in his profession and had one of the largest obstetrical practices in Paris. Despite his numerous engagements he found time to collect and publish the results of a great number of observations and a large amount of original work, especially upon the diseases incident to the puerperal state. He was for some years editor of the *Nouvelles Annales d'Obstétrique et de Gynécologie* and in 1883 he published his *Traité Pratique des Accouchements* which is considered to be a classic. He had been President of the Gynæcological Society.

June 6th.

[1] THE LANCET, Jan. 28th, 1899, p. 268.

SWITZERLAND.

(FROM OUR OWN CORRESPONDENT.)

Alcoholism in Switzerland.

DR. SCHLUB of Basle publishes interesting details on this subject aided by the official death reports and thus obtains statistics which, alas, must be even rather below the correct estimate, as only certain and evident cases of alcoholism are sure to be notified. From an analysis of the death-rate of the 15 largest towns of Switzerland, the following data are obtained. Out of a total of 7257 deaths occurring in the years 1891 to 1898, 465 deaths, or 6·4 per cent., were notified with the term "drunkenness" as playing a part in the causation of death. These notifications are sent to each practitioner from the statistical office at Bern on receipt of the death certificate to be filled in for statistical purposes with numerous details as to sanitation, causation of death, &c., but not bearing the name of the patient on the return sheet, in order that professional secrecy may be ensured. Of these 465 fatal cases, 397 referred to men and 68 to women, 263 belonged to the working-classes, and 178, or the high percentage of 40, to the educated classes. The percentage as regards the ages of the men ran thus: from 20 to 39 years of age, 10·6 per cent.; from 40 to 59 years, 15·5 per cent.; and over 60 years, 5·9 per cent. The 15 towns in question stood as follows: Fribourg, 11·2; Chaux-de-Fonds, 11·1; Locle, 9·6; Bern, 8·8; Lucerne, 8·2; Schaffhausen, 8·0; Geneva, 7·6; Neuchatel, 6·7; Zürich, 6·0; Winterthur, 5·3; Basle, 5·0; Lausanne, 4·8; Bern, 4·4; St. Gall, 3·3; and Herisau, 2·9.

Clinical Meeting at Bern.

On May 27th the clinical meeting was well attended, especially the opening lecture of Professor Kocher. I can only report on the most interesting of the 20 cases demonstrated. In cases of acute traumatic inflammation of the meniscus of the knee-joint he makes a small incision and performs the old operation of direct ignipuncture with the Paquelin cautery with best success. Skiagrams which were splendidly executed at the Roentgen establishment attached to the hospital proved of great use for diagnosis and treatment, especially in cases of fracture and dislocations. Thus in a case of total dislocation of the foot backwards with fracture or fissure of the malleoli a normal position was obtained through reduction after resection of the malleoli. In cases of supra-condyloid fracture of the humerus in children as deviation of the small fragment is inevitable Professor Kocher advocates incision and suture of the bone with subsequent proper extension. Fractures of the lower extremity he does not keep in bed but treats with "Geh-verbände" in order to avoid muscular atrophy. In cases of resection of the upper jaw and also of the tongue for malignant tumour he prefers a horizontal cut through the cheek to the usual incision under the eye in the one case and under the chin in the other. A case of diphtheria with softening of the posterior wall of the trachea from the cannula being left in too long after tracheotomy when the patient had alarming attacks of dyspnœa was treated by transplantation of an osteo-periosteal flap of the clavicle. The case did well and six months after the operation the boy was shown as remaining well. Professor Sahli lectured on Angina Pectoris, dealing with the diagnosis of true and spurious angina, emphasising the importance of the evidence of high blood-pressure as contra-indicating the use of

digitalis, and recommending the nitrites and nitro-glycerine as therapeutic agents.—Professor Tadassohn demonstrated some interesting cases, such as lichen ruber planus confined to the scrotum and the mouth; an "acrodermatite continue pustuleuse," apparently innocent but of very doubtful prognosis; and an erythema induratum (Bazin) in a scrofulous subject. In lupus erythematosus he advises the exhibition of quinine in doses of from 20 to 60 grains a day for months or the external application of a mixture in equal parts of alcohol, ether, and spirit of peppermint.

Zürich, May 29th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The Averting of Hail Storms.

HAIL, the "horrida grando" of Virgil, the "dira grando" of Horace, has nowhere more than in Italy been felt as a scourge. In 10 minutes the bursting of a hail-cloud may convert a whole district, smiling with the promise of an abundant harvest or vintage, into a scene of desolation, leaving behind it economic ruin, hygienic harm, misery—individual and social—seldom even palliated by the heavy insurance which has already anticipated much of the hard-earned gains of the husbandman. In London some 25 years ago a fog of almost unprecedented duration and density inflicted such damage, notably on a great cattle show held at Islington, that it was seriously proposed on future visitations of the kind to clear the air by artillery, even at the cost (as then estimated) of £10,000. The proposal, transferred to Italy and applied to her hail-storms, has quite lately been energetically carried out—mainly on the lines recommended and practised in Styria by Signor Stiger. At Turin a member of Parliament largely interested in agriculture, Signor Ottavi, has shown that the mortar used in Styria, and still more the "Unger cannon," also in use there, may be constructed in any well-appointed Italian foundry—so simple are they in construction and operation. The mortar, for example, with a charge of from 80 to 100 grammes of gunpowder, rammed in not very tightly and plugged at the mouth with a stopper of unseasoned wood, can when fired off in repeated volleys keep a hail-cloud at bay and even break it up and disperse it. Throughout Italy, but more particularly in the more robust, wealthier, more enterprising north, one reads of experiments tried with the most gratifying results in this new method of dispersion of hail. Let me quote an instance just communicated to me. In various districts of Monferrato in the Alta Italia a violent thunderstorm accompanied by hail was devastating a series of upland farms at Trino Vercellese, Camino, Pontestura, and Quarti. The storm was signalled to the people of San Giorgio Monferrato as "terrible," so they lost no time in preparing to give it a "warm reception." They had quite a park of artillery prepared, the cannon, as described by Signor Ottavi, being in great force. On came the storm-cloud and out flashed the volleys in rapid succession, till after two hours' bombardment the cloud revealed to the eye-witnesses a large rent through which the blue sky was visible. It thereafter drifted away, leaving the "colles apertos," of which, according to Virgil, "Bacchus" is so enamoured, in full possession of all their menaced riches and smiling at the destruction they had escaped. Not a hailstone fell, but from the ragged edges of the retreating cloud there dropped a gentle and not unwelcome dew, hardly amounting to rain. The vine-dressers, turned artillerymen for the nonce, find the practice more amusing and less costly than insurance. Of the two "charges" they prefer that of the "Unger cannon."

Three Deaths from Reckless Prescribing and Dispensing.

I have had too frequent occasion to record the fatal results of the scandalously loose practice of prescribing orally and of dispensing without written instructions still prevalent in Italy and still jeopardising the lives not only of Italians themselves but of the stranger within their gates. The criminal court of Tortona, a considerable town between Alessandria and Genoa, supplies the latest and not the least sensational instance in point. Dr. Giacomo Pezzotta, a medical practitioner, and Signor Francesco Beltrami, pharmaceutical chemist, were put on trial, "the former for having prescribed orally and without indicating the dose, the latter for having made up without prescription in writing a preparation of 'phosphorated cod-liver oil' (*olio di fegato di merluzzo fosforato*) which, contained in a bottle and exhibited thereafter to three children for the period of four days and in the dose of one teaspoonful per diem, caused their speedy death from the excessive quantity of phosphorus ingested." The Public Prosecutor contended that Pezzotta's responsibility lay in the fact that he had entrusted the preparation of a drug containing a powerful poison to a pharmacist without the formulæ and instructions as to use which are required by law, and that Beltrami's responsibility consisted in his having made up the prescription "arbitrariamente" (arbitrarily) and handed it over to his client without indicating its composition and character, the dose in which it was to be taken, or indeed any of the precautionary marks insisted on by the "regolamento sanitario." The accused were defended by able counsel drawn from the Milanese and Bergamasque bars whose contention was that the true cause of the death of the first child had not been juridically proven and that the deaths of the other two were attributable to the negligence of those about them, not to the "imputati" (defendants). Numerous witnesses, including practitioners, professors, and chemists, were called on either side, the whole trial lasting over three days. The court found for the prosecution that both Pezzotta and Beltrami were responsible and condemned the former to imprisonment for two months and 15 days with payment of a fine of 83 francs (£3 6*s.* 8*d.*) and the latter to five months' imprisonment and 750 francs (£30) fine. Both parties were also amerced in costs. As I have often put in evidence, such cases of criminal malpractice seem to survive the most exemplary retribution of the law and—if the supporters of the Santini Bill would only see it—explain and justify the misgivings with which an English-speaking *clientèle* regards the consignment of its health (and more) to practitioners among whom such negligence is possible.

"Rectores Magnifici" of Padua and Turin.

The University of Padua has just elected as its "Rector Magnificus" its illustrious Professor of Clinical Medicine, Dr. Achille De Giovanni—the retiring holder of that office. He had 27 votes against 22 given for his rival Professor Nasini, lecturer on Chemistry. For the similar post vacant in the University of Turin by the death of Dr. Cesare Nani, Professor of Legal History, there are several distinguished candidates, among whom the medical names of Mosso and Bizzozzero have been mentioned.

June 5th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Plague in Alexandria.

ALL readers of historical medicine know that plague was constantly present in Egypt from the days when Egypt and Greece were tottering towards decay and both shortly to become Roman provinces, until 1844 when Kinglake wrote his admirable "Eothen" and taught our fathers and grandfathers the delights of Oriental travel. The plague left England in the seventeenth century suddenly and with equal abruptness it disappeared from Egypt, though of late years it has often been in Tripoli, Arabia, and Uganda. Now after 55 years absence it is again in Alexandria and though its coming is still shrouded in some mystery it is assumed that it has reached us by some indirect channel from the Hedjaz. Cholera has come to Egypt so often from the holy places that it seems not unfair to remember that plague has been present in Jeddah for three seasons and that there have been more than 100 deaths from it there during the last three months. The modern Alexandrian story is as follows. On May 2nd a Greek boy, about 14 years of age, was admitted into the Greek Hospital with fever and a right axillary bubo. Plague was suspected, but as the case was decided by the clinical and bacteriological experts not to fulfil all the necessary conditions and as there was no evidence of the disease then existing in Egypt it was not officially reported. However, the medical officer of health took the precaution of tracing the patient's surroundings. He lived in an inn

frequented by Jews and other travellers, none of whom could be traced to Jeddah or to the pilgrimage. On May 16th another Greek was admitted into the Greek Hospital with a left axillary bubo, delirium, and a temperature of 105·8° F. This proved to be an undoubted case of plague and was at once published. Since then there have been six cases, all of bubonic plague—four natives and two Greeks—all living in the poorest quarters of the town and not far removed from each other, but the cases are not intimately connected. There are also the stories usual in plague-time of rats having been seen sickly and dying without apparent cause. So far the cases bear out the theory that the propagation of the disease depends more upon place infection than upon direct transmission from one individual to another. All the eight cases, if we are to accept the original doubtful patient, have been of the bubonic type, and therefore much less infectious than the pneumonic or septicæmic variety. To those who know nothing practically about plague it may be justifiable to point out for comparison that tubercle may be a local manifestation, such as "a post-mortem finger," or the bacilli may enter the bronchi and set up tuberculosis of the lung; or, again the microbe may directly enter the blood-current and set up a general poisoning, acute miliary tubercle. Of these three it is only the second which is dangerous from the contagious point of view. Now, the plague bacillus may enter an abrasion on the hand or foot and produce local poisoning, evidenced by a bubo in the armpit or the groin, but the bacilli are safely locked up and cannot very well spread the disease, for when the bubo suppurates the pyogenic germs are found to have killed the plague cocci. But if the coccobacillus enters the respiratory passages the pneumonic form is produced and the attendants are at once in danger. If the microbe gets admission into the circulation an acute septicæmic variety occurs which usually kills the patient before he has much time to spread the disease.

Prophylactic Measures.

The Quarantine Board at Alexandria has had some special meetings and has decided by a large majority to insist upon the medical examination of all passengers and baggage before sailing from Alexandria, and in addition the disinfection of the soiled linen of all third-class travellers. A few Greeks have left the city for Europe, but there has been no general flight or panic. Sir John Rogers and Pinching Bey are at Alexandria, superintending sanitary measures with their well-known energy and Dr. Bittar is also there to assist in bacteriological investigations. The sick are rigorously isolated and their dwelling places are very carefully disinfected, some of their effects being destroyed, and their friends and associates are closely watched. One of the patients was found to live in the house of a laundress and all her customers had to be inspected. There is no plague in any other part of Egypt and there is no increase in the death-rate either in Alexandria or elsewhere. Everything tends to the belief that the poison is localised and can be eradicated.

The Pilgrimage.

There has been no plague among pilgrims this year, no suspicion of it at Tor, and the latest accounts all say that there is now no longer plague at Jeddah.

Cairo, May 29th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Convicts and Phthisis.

AT the recent Prison Congress in New Orleans Dr. Blake, physician inspector at the Alabama Penitentiary, called attention to the fact that phthisis is greatly on the increase in prisons in the South. Taking his own State he quoted statistics to show that in 16 years the percentage of convicts dying from phthisis had risen from 17 per cent. to nearly 37 per cent., while during one year—1895–96—above 50 per cent. of the deaths in the penitentiary had been from that disease. Dr. Blake quoted figures from Mississippi, Texas, Georgia, Virginia, and other States, going to show that phthisis had steadily increased among the prison population. In Texas in 1896 two-thirds of the total number of deaths of convicts were caused by phthisis. The trouble, according to Dr. Blake, lies in the fact that tuberculous and non-tuberculous convicts are herded together. Especially is this the case in the winter months when the greatest number of convicts is crowded into the smallest possible space in order to economise fuel and blankets.

Conclusion of the Beef Court.

The above court decides that the testimony is conclusive that both the refrigerated beef and the canned beef were in good condition when delivered to the Government and continued so until issued to the troops, except in special instances where the deterioration was due to accidental conditions in transportation or to the influence of the tropical climate. The report admits the liability of refrigerated beef to taint quickly when removed from the ice chests. The court finds the charges of "embalming" the fresh beef to have been unsubstantiated by the testimony, and says that no chemicals were used to preserve it. It also finds that it would have been impracticable to secure beef on the hoof for the Cuban campaign. The finding is likewise in opposition to the assertion of General Miles that the use of the beef was an experiment. Much attention is given to the charges concerning the canned roast beef, and it is stated that the testimony proves it to have been wholesome and nutritious when used in moderation and under favourable circumstances. The position is taken that too much of this article of food was supplied to the men, and that under the circumstances it was unpalatable and found undesirable as a continuous ration. The fact is set forth that the canned roast beef had not been used to any appreciable extent before the beginning of this war, and it is therefore regarded as an untried ration practically. In view of this fact the Commissary-General of Subsistence is criticised for the purchase of the meat in such extensive quantities. As to the character of the meat for wholesomeness and nutrition the reports of Professor Atwater and Professor Chittenden are quoted at length sustaining the claims in this respect. The findings of the court are that the meat was not "doctored"; that it was the beef of commerce; that there was no more neglect than was incident to the hurried preparations for war; that the inspection, while generally according to regulations, was not always up to requirements, and that the sickness of the troops was not to any great degree occasioned by the use of either the canned or the refrigerated beef. In the opinion of the Army Commission the following facts sufficiently indicate the causes of disease. The principal reasons for the disease prevalent in the army were exposure to extreme alternations of daily temperature, to incessant downpours of rain, and to the malarial influences peculiar to the most dangerous portion of the island of Cuba at the unhealthiest season of the year. Lack of shelter from sun and rain and irregular, inadequate, and insufficient supplies of food, fuel, and clothing, due to want of transportation, also entered as contributory causes of the sudden and alarming increase in the sick report which all accounts agree as having taken place between July 8th and 10th, and after the command had been subjected for some days to the fatigue and exposure incidental to the digging and manning of trenches, the maintenance of an outpost service, and the conduct of siege operations. That the sickness was due to particular articles of ration rather than to the character and components of the ration itself and its general unsuitability to existing conditions is not clear. This is shown by the fact that though there is a very marked difference in the meat components of the ration issued to and used by the different commands of the army the sick rate was very much the same in all. A division, for instance, which subsisted largely on bacon and used no canned beef and but little refrigerated beef suffered as seriously from sickness as another division which used the canned fresh meat and received also considerable quantities of refrigerated beef. Having regard, therefore, to the testimony adduced as to the causes which are admitted to have operated to produce intestinal disorders, such as the eating of tropical fruits, the use of unboiled and unfiltered water, malarial poisoning, the exposure to daily rains and the considerable diurnal variations of the temperature and the like, the court finds it impossible to conclude that either the canned fresh beef or the refrigerated beef appeared to any considerable extent as causes of intestinal troubles.

Mortality in the Philippines.

Surgeon-General Sternberg has just received from Manila a report giving the mortality record of the Philippines for the

five years ending 1898. It is based on official Spanish reports of the Christian population and those non-Christians who were Spanish subjects. It shows that at Manila among 315,571 inhabitants the average mortality was 26·2 per 1000. At Iloilo it was 24·4 per 1000. In the island of Negros, among a population of 321,777, it was 22·4 per 1000. The lowest death-rate was at Mariannas, it being only 10·4, while the highest, at Cagayan, was stated as 59·9 per 1000. Compared with statistics of other countries given by Professor Richmond Mayo-Smith of Columbia University the figures relating to the Philippines show that in some parts of the islands the death-rate was exceedingly low, while in other parts it was very high. Professor Mayo-Smith said that the census of 1890 showed a death-rate in the United States per 1000 of 17 for native-born whites of native parentage, 24·42 for native-born whites of foreign parentage, 19·85 for foreign-born whites, and 19·57 for coloured people. In 1893 the statistics showed the following death-rates in the countries named: Italy, 25·3; Germany, 24·6; England, 19·4; United Kingdom, 19·1 per 1000. With reference to the deaths of soldiers in tropical countries Professor Mayo-Smith says that the death-rate in the British army in 1891 was 4·7 at home, 13·5 abroad. In Ceylon 44 out of 1000 soldiers died in the first year, 48 in the second, and 49 in the third. Out of 1000 soldiers in Jamaica 77 died during the first year, 87 during the second, and 93 during the third year.

Hospital for Phthisical Sailors of the Merchant Marine.

The Surgeon-General of the Marine Hospital Service is making preparations for the treatment of all sailors of the merchant marine who are suffering from tuberculosis at the new marine hospital now in course of construction on the abandoned military reservation at Fort Stanton, New Mexico. This reservation contains about 10,240 acres and the buildings on it are being repaired and will be fitted up as a sanatorium for the treatment of tuberculosis. The hospital is to be furnished with modern hospital furniture and supplied with all modern instruments and apparatus for the scientific treatment of phthisis. The benefit of the out-door life in this climate which is so favourable is expected to have a most marked effect upon the patients. It will be managed on the same plan as the National Soldiers' Home. Light employment will be given to those who desire it and the many acres surrounding the hospital will be put under cultivation, the patients raising the better part of the necessities required for food.

May 18th.

Obituary.

JOHN GEORGE SINCLAIR COGHILL, M.D., F.R.C.P. EDIN., M.R.C.P. LOND.

DR. J. G. SINCLAIR COGHILL, who died at Ventnor, Isle of Wight, on June 5th, was a man of many attainments but was best known to the medical profession and the general public in connexion with his work at the Royal National Hospital for Consumption and Diseases of the Chest, Ventnor. He had for many years been senior physician to this hospital. Dr. Coghill was in his sixty-fifth year and belonged to a Scotch family. His father, who had been in a Highland regiment and had fought in Spain in the British Legion under General Sir George De Lacy Evans from 1835 to 1837, was a well-known resident in Edinburgh some 40 years ago, a fine example of the retired military man, full of kindly humour and very popular among a wide circle of acquaintances. Dr. Coghill studied medicine in Edinburgh and had a distinguished career as an undergraduate, taking gold medals in anatomy, midwifery, and medical jurisprudence. While he was still at class work the Russian war broke out, and he interrupted his studies to volunteer as a surgeon's assistant in the navy, the result being that he served in the Baltic Fleet and received a medal. In 1857 he graduated as M.D. (with honours) at Edinburgh University, and in 1864 was admitted F.R.C.P. Edin. In 1858 he was appointed demonstrator of anatomy in Glasgow University under the late Professor Allen Thomson, in which capacity he proved himself an able lecturer and teacher. In 1861 he resigned this position in order to proceed to Shanghai, his successor as demonstrator being Dr. John Cleland who on Professor Allen Thomson's retirement in 1877 was appointed to the vacant chair. Dr. Coghill remained several years in Shanghai, becoming ultimately municipal medical officer and consulting physician to the General Hospital. On his return to this country he temporarily conducted the midwifery class in Edinburgh University after the death of Sir James Simpson in 1870, and lectured on pathology and pathological anatomy in the Edinburgh Medical School from 1873 to 1876. He then joined the staff of the Royal National Hospital for Consumption where he spent the remainder of his life. An account of his method of treating phthisis will be found in a paper which was read by him in Berlin on May 26th at the International Congress on Tuberculosis and was published in THE LANCET of June 3rd (p. 1479). His first contribution to our columns appeared just 40 years ago. It was a report of an operation for vesico-vaginal fistula and was printed in THE LANCET of May 7th, 1859. Later in the same year he published in our columns a course of lectures on the Peripheral Nervous System delivered in Glasgow University. Dr. Coghill was a Vice-President of the British Gynæcological Society and a Vice-President (Section of Therapeutics) of the ninth International Medical Congress held at Washington in 1887. His death was sadly sudden. On his return from Berlin on June 2nd, apparently in perfect health, he was seized suddenly with gastro-intestinal disturbance. This was followed on June 3rd and 4th by hæmatemesis and melæna, and on June 5th symptoms of perforation of the stomach supervened, from which he died.

WILLIAM ROOCROFT, J.P., M.R.C.S. ENG., L.S.A.

A PROMINENT and well-known figure has been removed from amongst the medical men of Wigan by the death of Mr. William Roocroft which occurred at Brondesbury-villas, Kilburn, London, on May 28th. Deceased was in his seventieth year. He was born at Coppull, near Wigan, on July 5th, 1829, and was educated at Standish Grammar School under the Rev. Mr. Price. He became a student of the Liverpool School of Medicine and afterwards of King's College, London, qualifying in 1852, when he became a M.R.C.S. Eng. and L.S.A. Lond. The same year he was appointed house surgeon to the then existing Wigan Dispensary—a post he held until he commenced practice on his own account in 1854. He became known in the district as an operating surgeon and soon became surgeon to several large collieries and clubs in the town. He was one of the honorary medical officers to the Royal Albert Edward Infirmary, Wigan, retiring in 1884, when he was placed on the consulting staff, his place on the acting staff being filled by his son, Mr. William Mitchell Roocroft. Mr. Roocroft was a keen sportsman and was for 30 years a member of the Aspull Hunt. He was a member of the Wigan Town Council for a few years, but suffering defeat in 1868 he never again sought re-election. In 1870 he was placed on the Commission of Peace for the borough of Wigan and for a long period took an active part in magisterial work, often acting as presiding magistrate. He was a man of striking personality, brusque in manner, never hesitating to give expression "to the faith that was within," sometimes to the annoyance of his friends; but with all this he was a most sociable friend. Being one of the old school of general practitioners and holding no medical degree he would rightly insist on being called "Mr." (and not "Dr.") Roocroft, sometimes to the amusement of his younger professional friends who loved to hear him emphasise the term "Mr." Mr. Roocroft, who was joined in practice by his son (Mr. W. M. Roocroft), had been in failing health for the past four or five years and two years ago left Wigan for the south of England, passing part of the time in Eastbourne and the last few months at Kilburn, where he died, leaving a widow, one son, and a daughter.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. A. Ziegler, Chief Surgeon of the Swiss army.—Dr. Giovanni Inverardi, Professor of Midwifery and Gynæcology in the University of Padua.—Dr. A. Zinnis, Professor of Children's Diseases in the University of Athens.—Dr. Affonso Ramos, Director of the Federal Bacteriological Laboratory, Brazil.—Dr. Ezequiel Correia dos Santos, formerly Professor of Pharmacology in the Rio de Janeiro University.—Dr. R. H. Plummer, Professor of Anatomy in the Cooper Medical College, San Francisco

THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

THE fine weather during the past week brought out one great defect of the new Council chamber, the absence of all proper ventilation. The effect of this is aggravated by the glass roof of the room, through which the rays of the sun stream down on the devoted members and especially on the President. On Monday the temperature of the Council chamber was 75° F. The members kept remarkably cool considering all things, but it is understood that before the session closes a committee will be appointed to deal with this question. Mercifully, no pathological sequelæ have resulted so far, while it would almost seem as if the effect had been to favour the coolness and equanimity of the members.

The session of the Council up to the time of our going to press retains the character of having been one of the liveliest and longest on record. On the whole, the character of the debates has been well sustained. The impending withdrawal of Dr. Church on account of his election as President of the Royal College of Physicians of London is much regretted. His practical judgment and his firmness in contending for what he thinks right have been found very useful, especially in the Education Committee. There are sister bodies which do not object to their presidents being on the General Medical Council, but the College in Pall Mall is very emphatic on this point. Oxford University will be represented by Dr. J. F. Payne in the next Council and the Royal College of Physicians of London will monopolise the statesman-like and judicial qualities of Dr. Church.

Nearly three days were occupied in hearing penal cases and four names were removed from the Register. On a future occasion we may have to point out some new features in the disciplinary action of the Council. Meantime our readers will do well to scan pretty closely the cases dealt with. The offences brought to light and the methods in dealing with them of the Council are both worthy of attention. In some cases the judgment of the Council has been deferred to give time for the abandonment of practices of which it disapproves—a very proper course, especially when the only alternative is immediate removal from the Medical Register with much uncertainty and difficulty as to restoration.

The work of committees has seldom been more arduous than in the recent session. The Education Committee has sat three or four days almost consecutively. The task of deciding on the merits of different preliminary examinations and of raising the standard all round is found to be a very difficult one, affecting many interests and exciting many fears of serious depletion of the medical schools. Much praise is due in this connexion to Sir J. Batty Tuke and to Dr. Donald MacAlister, but many questions remain under consideration. More time is demanded and it is felt that an independent report from experts on the subjects in dispute will tend to allay irritation and objection. The Council has conceded both points. We shall have to wait longer than was expected for the result, but it cannot fail to be more reliable when it comes. This committee, too, has had to deal with the question of the recognition of science teaching in schools and the danger of losing one of the five years for medical study. Here, it will be seen, it came into somewhat sharp conflict with the representatives of the English Conjoint Board. The conflict became more complicated by Dr. Church, himself a member of the Education Committee, joining Mr. Bryant and Sir Dyce Duckworth in defending the right of the corporations to fix the curriculum without consulting the wishes of the Council. In the end the committee triumphed. Sir J. Batty Tuke was no doubt right in his main contention, but went a little too far in charging the Conjoint Colleges of England with disloyalty to the General Medical Council. They did not deserve this charge.

The work of the Committee upon the subject of Medical Aid and Friendly Societies, of which Dr. Glover is chairman, will call for more particular notice. There will be little difference of opinion as to the great importance of a board of conciliation for the settlement of questions in dispute between the profession and the friendly societies, and the committee will deserve the support and thanks of the profession if it can bring into the discussion for settlement, as Mr. Bryant maintains it can, the question of a wage limit. Scarcely less important is the resolution passed by the Council on the recommendation of the committee strongly disapproving of the systematic canvassing and advertising by which medical aid associations connected with insurance business are pushed.

A very good thing was done on Wednesday on the motion of Dr. Bruce. The Penal Cases Committee was enlarged. The proposal to do this has often been made before unsuccessfully. The responsibilities of this committee are great and it was scarcely large enough for its work.

We have referred to the burden and heat of the day and have indicated the patience with which these have been borne by the members of the General Medical Council. It is gratifying to know, if rumour may be trusted, that the severity of their labours has been varied by some pleasant social gatherings. At least two very genial banquets must be mentioned, of which the respective hosts were the President of the Royal College of Physicians of London and the President of the General Medical Council. At the latter the Clerk of the Privy Council and the Presidents of the Royal Colleges were present, as were also Mr. Wheelhouse, Sir Walter Foster, Sir William Priestley, and others.

THURSDAY, JUNE 1ST.

THE Council met to-day, Sir WILLIAM TURNER, President, being in the chair, and resumed the work of the session.

The Case of Samuel Bingham Shekleton.

The Council proceeded to the consideration of the case of Samuel Bingham Shekleton, of 17, Compton-avenue, Barking-road, East Ham, registered in Ireland Nov. 26th, 1874, as Lic. R. Coll. Surg. Irel., 1872, who had been summoned to appear before the Council to answer the following charges as formulated by the Council's solicitor:—

1. That in the year 1895 he aided and assisted an unqualified person named Julian Averfield Rowland to procure himself to be registered under the Medical Act, 1858, under the name and with some of the registrable qualifications of one Edward Joseph Nugent, by making and producing false and fraudulent representations. 2. That he aided and assisted the said unqualified person to assume the position of a duly qualified and registered medical practitioner and to carry on medical practice as though he had been duly qualified. The false representation above mentioned is contained in the application for registration forwarded by the said Julian Averfield Rowland, in the name of the said Edward Joseph Nugent, to the Irish Branch Council, dated June 25th, 1895, which contains a certificate of identity of the said date signed by him (Shekleton).

On the name of the accused practitioner being called no response was made and accordingly the case proceeded in his absence.

Mr. FARRER, the Council's solicitor, said the notice of the inquiry had been given to Mr. Shekleton in the usual way. A summons had been duly served and a letter from Mr. Shekleton showed that he had received the summons. In this letter Mr. Shekleton said he never knew Rowland

under any other name than Nugent and he signed the paper to assist him to get on the Register, fully believing him to be Nugent. He never assisted him in any other way beyond this, that he resided for a time in Rowland's house.

Dr. BATEMAN, of the Medical Defence Union, then addressed the Council in support of the charge. He explained how suspicion came to be directed against Rowland and how proceedings against him were thwarted by the fact that he got admission to the Medical Register, and how in the end he was tried and convicted at the Old Bailey for false impersonation and sentenced to three years' imprisonment. Dr. Bateman further presented to the Council certain circumstances which he claimed showed that Mr. Shekelton was aware of the real identity of Rowland.

While the members of the Council were deliberating in private on the case information was received that Mr. Shekleton had presented himself at the office. The Council resumed proceedings in public and gave Mr. Shekleton an opportunity to explain. At the outset, in answer to the PRESIDENT, he admitted that he had written a letter stating that he would attend at 2 o'clock—the hour named in the Council's summons—but he was sorry he could not be present earlier owing to miscalculation of the time required to reach the Council's offices by train and omnibus.

The PRESIDENT said that Mr. Shekleton must consider it an act of grace on the part of the Council to allow him an opportunity to be heard, particularly as his non-appearance at 2 o'clock would tend to disarrange the whole procedure.

Mr. SHEKLETON again expressed regret and in reference to the charge against him said that he could not give more explanation than he had given in the letter which he had sent to the Council. He was perfectly aware that the charge was a very serious one against his personal conduct. In answer to further questions he stated that he first knew the man named in the charge some 20 years ago when he was in Gloucestershire. He knew him then only as "the doctor." He was a medical assistant then and he was on speaking terms with "the doctor." It was not until 1890 that he knew his name was Nugent. In that year he saw him at his house in Dumbarton-road where he was in practice under the name of Nugent. He had signed the papers in the full belief that he was the man. When the papers were presented to him he had asked how many years had elapsed since he first knew Nugent and had received the reply that it was at least 16 years. He had then said that he could conscientiously sign that he had known Nugent about 16 years. Yet he certainly had not known this man for 16 years as Nugent. He had never known him in connexion with Woolwich. He admitted that the certificate he had given said that he had so known him. The certificate was entirely in his handwriting. No doubt it was written at Nugent's—the supposed Nugent's—dictation. The man had been in practice for eight years under the name of Nugent. He had never heard the name of Rowland in connexion with this man and never had had the slightest suspicion that he was not Nugent.

Strangers were ordered to withdraw and the Council deliberated on the case in private. On the readmission of the public

The PRESIDENT announced that the resolution the Council had come to was:—

(*a*) That the Council do proceed at once to pronounce its judgment on the case; (*b*) that the charge made against Mr. Samuel Bingham Shekleton has been proved to the satisfaction of the Council; and (*c*) that the Council do now judge Mr. Samuel Bingham Shekleton to have been guilty of infamous conduct in a professional respect and do direct the Registrar to erase from the Medical Register the name of Mr. Samuel Bingham Shekleton.

Mr. SHEKLETON withdrew.

The PRESIDENT said he had received two resolutions in connexion with the decision just arrived at.

Dr. CHURCH thereupon moved:—

That the result of this day's inquiry *re* Samuel Bingham Shekleton, together with a copy of the papers brought before the Council, be communicated to the proper authorities of New South Wales, drawing attention to the statement that Edward Joseph Nugent has been placed on the Colonial Register and is now practising in New South Wales; and further to the fact that his name has been erased under Section XIV. of the Medical Act, 1858, from the Medical Register of the United Kingdom.

This motion was agreed to.

Sir WILLIAM THOMSON moved: "That the Council hereby approves of the action of the Executive Committee in removing from the Register the name of Edward Joseph Nugent, L.R.C.S. I. and L.K.Q.C.P. I."

Dr. MACALISTER thought they were not called upon to make any charge against Nugent.

The PRESIDENT said that in his opinion the motion was unnecessary. Why should they put in their minutes a special motion approving of their doing their duty?

After some further remarks the motion was rejected by 12 votes to 10.

Mr. HORSLEY asked if this vote meant that the Council disapproved of the action of the Executive Committee.

Dr. MCVAIL: Most undoubtedly.

Dr. MACALISTER: We cannot go into what was in the mind of those who voted against the resolution.

Mr. HORSLEY: Pardon me, Dr. MacAlister, but my question was addressed to the President and not to you. I ask the President to rule whether we are to regard the negativing of the resolution just rejected as meaning that the Council disapproves of the action of the Executive Committee, because if so I should like at some later period of the session to put ourselves right.

The PRESIDENT: I understand that those who voted for the motion did not disapprove of the action of the Executive Committee, but I cannot interpret the opinion of those members of the Council who opposed the motion.

Mr. HORSLEY: I must say that if you are entitled to interpret the minds of some of us you are entitled to interpret the minds of the rest of us.

The PRESIDENT: I would not go so far as that.

Mr. BROWN: I should like names to be taken down.

Cries of "No, no," greeted this request and the Council proceeded to hear the next case on the programme.

The Case of James Jerome McKay.

The Council proceeded to the consideration of the case of James Jerome McKay, of 154A, Wandsworth-road, S.W., registered in England, July 17th, 1876, as of Bally Roberts, Fermoy, County Cork, Mem. Roy. Coll. Surg. Eng., 1876; Lic. Roy. Coll. Phys. Lond., 1877, who had been summoned to appear before the Council to answer the following charge as formulated by the Council's solicitor:—

That having, as a registered practitioner, undertaken, on the order of the coroner, to make a proper and complete post-mortem examination of the viscera, head, chest, and abdomen of the body of a dead child named Ernest Mackenzie for the purpose of ascertaining and informing the Coroner's Court of the cause of the death of such child, and not only failed to make the examination which was required, and failed and omitted to ascertain the cause of death, but subsequently deposed before the Coroner's Court (contrary to the facts) that he had ascertained the cause of death by making a complete and careful examination of all the organs of the deceased child. The documents forwarded to the General Medical Council in support of the complaint consist of the information in writing of the said coroner, dated Feb. 4th, 1899, and a certified copy of the depositions taken at the inquest on the death of the said child on Dec. 9th and 12th, 1898. Complaint is also made of Mr. McKay's conduct by the Medical Defence Union and they will conduct the case and tender the coroner as a witness.

Mr. MCKAY attended in answer to the summons and in reply to a question by the PRESIDENT as to whether he was accompanied by a solicitor or counsel he stated that he was not, but he appeared in support of his own case.

Dr. BATEMAN, who appeared for the Medical Defence Union, stated that Mr. Braxton Hicks, the original complainant, would be unable to attend and that he undertook to conduct the case on his behalf and that of the Medical Defence Union.

Mr. FARRER, solicitor to the Council, read the charge against the accused.

Dr. BATEMAN in stating the case mentioned that Mr. McKay had been committed for perjury by the coroner, but when the case was tried before Mr. Plowden, one of the metropolitan magistrates, that gentleman had treated the matter as one of dispute between two medical men and had dismissed the summons. The charge of perjury brought before Mr. Plowden was a criminal charge. That which was now brought before the General Medical Council was a civil charge. The accused could not successfully plead that having been acquitted by Mr. Plowden of the charge of perjury he could not be guilty of the charge under which he was now summoned.

The PRESIDENT said to Mr. McKay that he could now state his case and produce his proof.

Mr. MCKAY said that since he was before Mr. Plowden he had not been in practice. The charge was preferred against him by the Crown and on a judicial examination he was found to be an innocent man. He did not want to say a word against the coroner but he must ask this, Why did not the coroner give him the chance to be present at the second post-mortem examination?

The PRESIDENT: You were not asked to be present at the second post-mortem examination?

Mr. MCKAY: I was not.

Mr. TEALE: Was that the ground on which you were acquitted?

Mr. MCKAY: I cannot tell.

Mr. HORSLEY wanted to know whether Mr. McKay would abide by an answer previously given by him that he was perfectly sober when sent for to attend the second post-mortem examination.

Mr. MCKAY: Perfectly sober on that day, sir.

Mr. HORSLEY: Then I would ask if Mr. McKay fully understood the gravity of the matter?

Mr. MCKAY: I certainly did, as I stated in open court.

The PRESIDENT: You realised the position you were in?

Mr. MCKAY: Certainly, sir.

The PRESIDENT: Is it your defence that Mr. Plowden disposed of the matter?

Mr. MCKAY: I am telling you the truth so far as I am concerned.

The Council deliberated on the case in private. On the readmission of the public the PRESIDENT announced that the decision was as follows:—

(1) That the Council do proceed at once to pronounce its judgment on the case; (2) that the charge made against Mr. James Jerome McKay has been proved to the satisfaction of the Council; and (3) that the Council do now judge Mr. James Jerome McKay to have been guilty of infamous conduct in a professional respect and do direct the Registrar to erase from the Medical Register the name of Mr. James Jerome McKay.

The Board of Education Bill.

On the motion of Dr. MACALISTER, seconded by Mr. BRYANT, the following report was adopted:—

The Business Committee beg leave to report that a communication addressed to the President by the Honorary Secretary of the Royal Institute of Public Health has been referred to them as being of the nature of a petition. On examination it appears that the communication has been addressed to the Medical Council under a misapprehension, as the Council is not a medical corporation in the sense intended by the writer. The Committee recommended that the President be requested to send a reply to the foregoing effect.

The request from the Royal Institute of Public Health was that the General Medical Council should petition Parliament in favour of the appointment of a medical officer under the Board of Education Bill—a measure which has already passed the House of Lords.

Midwifery Certificates.

Dr. MACALISTER, as chairman of the Business Committee, laid on the table copies of a memorial, dated March 30th, 1899, signed by 385 persons, on the subject of the alleged "improper conduct" of registered practitioners by participating in the issue to persons not medically registered of diplomas or certificates testifying, or implying, or that may be used to testify or imply, proficiency in departments of medicine, surgery, or midwifery.

The Case of William Stewart.

The Council proceeded to consider the case of William Stewart of Denton, near Manchester, registered in Ireland May 19th, 1887, as M.D., Mast. Surg., 1887, R. Univ. Irel., who had been summoned to appear before the Council to answer the following charge as formulated by the Council's solicitor:—

Complaint has been lodged with the Council by the Ashton-under-Lyne District Medical Society in relation to the Denton and District Provident Dispensary by whom he (Stewart) is engaged as medical officer and by whom an unqualified person named Burgess is engaged or employed as his assistant. The complaint is that he (Stewart) associates with the said unqualified person in the practice by him (Burgess) of medicine and surgery and permits him to carry on medical practice and is party to his administering medical aid and treatment to patients as if he were a duly qualified medical man.

Mr. H. Hyde, solicitor, attended on behalf of the Ashton-under-Lyne and District Medical Society in support of the charge.—Dr. Stewart appeared in answer to his summons, together with his counsel, Mr. H. Shawcross, and his solicitor, Mr. J. Bond.

Mr. FARRER, solicitor to the Council, having read the charge,

Mr. HYDE opened the case on behalf of the complainants. He pointed out that the dispensary with which Dr. Stewart was connected issued a report in which Mr. Burgess was described as Dr. Stewart's medical assistant and that there was good ground for believing that Dr. Stewart under cover of this dispensary connexion aided Mr. Burgess to practise on his own account, notwithstanding that Mr. Burgess was unqualified.

Mr. SHAWCROSS, on behalf of the accused, read the declarations which had been made in answer to those put in by the prosecution, contending that the whole of the so-called evidence against Dr. Stewart was only hearsay evidence and in a regularly constituted law court would at once be rejected as absolutely worthless.

Dr. STEWART was then called and examined. He emphatically denied any employment by him of Mr. Burgess as an assistant either when he was operating or at any other time. Mr. Burgess, he testified, was a dispenser and only that. He attended for some time at Hooleyhill Dispensary and then for a longer time at the central dispensary at Denton, but in both cases only to dispense such medicines as he (Dr. Stewart) had prescribed for patients whom he had seen. In his letter he had admitted that Mr. Burgess had been with him in his attendance on certain cases, but all that he had done was practically to clean the instruments after the operation. Mr. Burgess had a great deal of time free, having nothing to do between 11 o'clock A.M. and 5 P.M., and possibly he had made a great many friends in the district. But he (Dr. Stewart) could not control Mr. Burgess during the latter's hours of leisure. Still, he had never with his (Dr. Stewart's) consent or knowledge visited any persons as a medical practitioner. Mr. Burgess had had some medical education. He was not a graduate, but he had attended a full college course. He could not say whether Mr. Burgess had passed the qualifying examinations. However, he had looked upon Mr. Burgess not as a medical student but as a dispenser and no more.

Further consideration of the case was adjourned and the Council resolved to meet at the usual hour on the following day.

FRIDAY, JUNE 2ND.

The Council resumed to-day, Sir WILLIAM TURNER being in the chair.

The Case of William Stewart.

The Council proceeded with the consideration of this case.

Dr. STEWART, in answer to further questions, said that, generally speaking, he was on good terms with the rest of the profession in his neighbourhood. The affairs of the dispensary were managed by a committee which he understood consisted of 13 members and which appointed Mr. Burgess without consulting him and without his knowledge. Mr. Burgess had never attended an obstetrical case to his knowledge nor was he aware that Mr. Burgess had any private practice. He knew that the committee had not encouraged Mr. Burgess in any way to attend patients; in fact, he was supposed to do nothing beyond dispensing.

The Council deliberated on the case, being *in camerâ* for quite an hour and a half.

The PRESIDENT announced the decision arrived at. Addressing Dr. Stewart he said he thought that that gentleman would recognise from the time that the Council had taken to deliberate over the case that they had given very great consideration to it. He was instructed by the Council to tell Dr. Stewart that the charge made against him had been proved to the satisfaction of the Council, but he was further asked to point out that the Council took a grave view of the charge proved against him; that the offence was one which the Council might adjudge to be infamous conduct in a professional respect; that inasmuch as the case was one of the first of its kind which had come before the Council they postponed delivering their final judgment; and that accordingly they had adjourned the further consideration of his case until November next, and he was advised to reconsider in the meantime his position.

Dr. STEWART: May I ask any questions?

The PRESIDENT: No; you do not require to do so. This is the Council's decision.

The Case of Neville Holland.

The Council proceeded to consider the case of Neville Holland of 3, Durham-street, Lambeth, registered in England August 2nd, 1870, as Lic. Soc. Apoth. Lond., 1869; Mem. R. Coll. Surg. Eng., 1870, who had been summoned to appear before the Council to answer the following charges as formulated by the Council:—

(1) That he associated himself with an unqualified person of the name of Blumenthal at a surgery carried on at 121, Tyers-street, London, and aided and assisted such unqualified person in the carrying on by him of a medical practice; (2) that he assisted in, and was a party to, attracting practice to the said surgery by public advertisements; and (3) that he had violated the undertaking given by him to the General Medical Council in the month of November, 1895, that if his name was restored to the Medical Register he intended to act as an assistant to a registered practitioner, on the faith of which undertaking the General Medical Council permitted his name to be restored to the Medical Register.

The information and complaint were lodged by the coroner for South-West London and by the Medical Defence Union.

Mr. Braxton Hicks, the coroner, and Dr. Bateman, the secretary of the Medical Defence Union, attended in support of the charges. Mr. Holland appeared for himself. The charges were read by Mr. Farrer.

Dr. BATEMAN, in the absence at the outset of Mr. Braxton Hicks, opened the case against Mr. Holland. He mentioned that the latter's name had been erased from the Medical Register in 1895, and he had given the undertaking referred to in the charge when he applied for restoration in the year following. The present proceedings had been instituted because of what occurred in connexion with an inquest held in January last.

Mr. BRAXTON HICKS continued the opening of the case and read certain depositions taken at the inquest referred to. He thought the Council would agree that he was justified in asking whether Mr. Holland's conduct was not unprofessional conduct. It was impossible for him to wink his eye at it and say that the accused was not covering an unqualified assistant. If Mr. Holland could not keep a practice of his own the Council should not allow him to cover an unqualified man. It was a danger to the public if this was to be allowed.

The depositions referred to and a business card were put in. The latter offered advice and medicine for 4*d.* and midwifery attendance for 15*s.*

Mr. HOLLAND tendered himself as a witness on his own behalf.

The statement made by him in answer to the charges was read by Mr. MUIR MACKENZIE. In this it was stated that Mr. Blumenthal had a chemist's shop and wished a medical man to attend at it daily. If Mr. Blumenthal attended to any patients it was without his (Mr. Holland's) knowledge or consent. Mr. Blumenthal never did attend to a patient with his consent or connivance. There were other instances of chemists' shops in London where medical men attended daily. With reference to the charge as to advertising he did distribute some handbills, but he was not aware that the Council objected to the distribution of such advertisements on a man's first coming to a dispensary.

In answer to the PRESIDENT

Mr. HOLLAND said that his statement was correct and he had nothing to add to it and no further observation to make.

Mr. BRAXTON HICKS and Dr. BATEMAN stated that they had no wish to ask Mr. Holland any questions. No member of the Council desired to put any questions.

Mr. Holland and strangers having by direction of the PRESIDENT withdrawn the Council deliberated on the case *in camerâ*.

On the readmission of the public the PRESIDENT intimated to Mr. Holland that the charges made against him had been proved to the satisfaction of the Council who now judged him to have been guilty of infamous conduct in a professional respect and directed the Registrar to erase his name from the Medical Register.

Mr. HOLLAND asked if he still could attend midwifery cases.

The PRESIDENT: I am sorry I cannot advise you.

Mr. HOLLAND: Where can I get advised?

The PRESIDENT: I am afraid I cannot give you any advice on the matter.

Mr. HOLLAND: Can I act as assistant to a medical man? I have the opportunity of becoming an assistant and I want to know in what capacity I can act now that my name is erased from the Register?

The PRESIDENT: I have already said that I am not in a position to advise you.

The Case of William Henry Cossens.

On this case being called, and Mr. Cossens having appeared with his solicitor, it was agreed, on the motion of Dr. MCVAIL, seconded by Dr. HERON WATSON, to proceed with its consideration *in camerâ*. When the public were readmitted

The PRESIDENT announced that the Council had considered *in camerâ* the case of William Henry Cossens, of Derby-street, Prescot, Lancashire, registered in England on Oct. 22nd, 1886, as Lic. Soc. Apoth. Lond., 1885, who had been convicted of a misdemeanour at the Liverpool Assizes on Nov. 28th, 1898, and that on question put from the chair it had been resolved that William Henry Cossens having been proved to have been convicted of misdemeanour the Registrar be directed to erase his name from the Medical Register.

The Council adjourned.

SATURDAY, JUNE 3RD.

The Council met again to-day, Sir WILLIAM TURNER presiding.

The Case of Henry Rowton.

The Council proceeded to the consideration of this case which had been adjourned from the last session.

At the last session the Dental Committee reported the facts of the case as follows—viz.: that Henry Rowton was registered in the Dentists' Register on Nov. 12th, 1878, as having been in practice before July 22nd, 1878, in conjunction with pharmacy; that his address was 109, Hall-street, Dudley; that he was also registered in the Chemists' and Druggists' Register as having been in business before 1868; that on May 2nd, 1898, he gave and signed a certificate of death in the terms following: "This is to certify that Edward Fisher, aged three days, died on May 2nd, 1898, the cause of death debility from birth convulsions"; that on July 23rd, 1898, Mr. Rowton having been asked by the solicitor to explain his conduct wrote the following letter: "I do not attend patients or pretend to be a medical man. The children were brought to my shop and I told them to get a note from the parish doctor or one from the dispensary, which I suppose they neglected doing. The so-called certificates were information for the Registrar, which he has often sent for"; and that a letter was read from Mr. Rowton's solicitor stating that his client undertook never again to issue any documents which could be considered to be medical certificates or to attend any patients as a medical practitioner. The Dental Committee added a recommendation that no further action be taken in the matter and the decision of the Council was to adjourn the case until the present session.

Mr. FARRER informed the Council that both Mr. Rowton and Mr. J. D. Price, who was the complainant, had received notice that the case would be considered to-day, but no answer had been received from either of them.

After the Council had deliberated *in camerâ* the PRESIDENT announced that they had come to the following decision in the case—viz.: That the Council, taking into consideration the undertaking made on behalf of Mr. Henry Rowton that he will never again issue any documents which can be considered to be medical certificates or to attend any patients as a medical practitioner, resolves to proceed no further in regard to the charge found to be proved against him.

The Case of Clement Maguire Kershaw.

The Council then considered the case of Clement Maguire Kershaw in regard to whom the Dental Committee had found the following facts—viz.: The case of Clement Maguire Kershaw having been referred to them to ascertain the facts in regard to such case the Dental Committee find the facts, either admitted or proved, to be as follows:—

1. Clement Maguire Kershaw was registered in the Dentists' Register on July 22nd, 1891, under the 37th Section of the Dentists Act, without any diploma. His registered address is at Newtown, in North Wales. 2. The said Mr. Kershaw has a dental surgery at Newtown. He has also a branch practice which is carried on at Llanidloes, which is some miles distant from Newtown. 3. Mr. Kershaw formerly had branch practices at Welshpool and Llanfair, but these had been given up some time before the date of the complaint made against him. 4. Mr. Kershaw has had for five and a half years, and has now in his employment at a salary, an unregistered and unqualified person named Victor Neighbour. From time to time this unqualified person has been permitted by Mr. Kershaw to perform the operations of extracting teeth for patients and filling the teeth of patients with plastic fillings in the absence of Mr. Kershaw. In one case the said Victor Neighbour performed a dental operation on a patient under chloroform in the absence of Mr. Kershaw, it being stated that Mr. Kershaw was ill at the time. The chloroform was not administered by Victor Neighbour. 5. The said Victor Neighbour has been permitted by Mr. Kershaw to see patients independently of him and to do more than fell within the province of a mechanical assistant.

The PRESIDENT announced that the Registrar had received a letter from Mr. Maurice, the complainant in the case, saying that he was not going to appear that day.

Mr. MUIR MACKENZIE read the report of the Dental Committee given above and Section 15 of the Dentists Act of 1878 bearing on the case. The section says: "The General Council shall, for the purpose of exercising in any case the powers of erasing from, and of restoring to, the Dentists' Register the name of a person or an entry, ascertain the facts of such case by a committee of their own body not exceeding five in number, of whom the quorum shall be not less than three, and a report of the committee shall be conclusive as to the facts for the purpose of the exercise of the said powers by the General Council."

Mr. R. A. GERMAINE, barrister, addressing the Council on behalf of Mr. Kershaw, said he had no intention to dispute

the facts set forth in the report of the Dental Committee but he would ask the Council to consider that there were other facts which though, perhaps, not necessary for the committee went very considerably in mitigation or palliation of the offence. He might say that the finding of facts by the committee was very much less than the actual accusation when first brought before the Council. It was alleged against Mr. Kershaw that on several occasions he had allowed operations under chloroform to be performed by Mr. Neighbour, but when the accuser, Mr. Maurice, appeared before the committee he was only able to produce a single instance. Further, he asserted that the accusation would never have been brought against Mr. Kershaw by Mr. Maurice had not the former refused either to buy the business of the latter or enter into a partnership with him unless he undertook to produce his books, which apparently Mr. Maurice was reluctant to do. As for Mr. Neighbour he might say that he was a gentleman of good training and long experience. After he had been for a short time with Mr. Kershaw he was introduced to Mr. R. Snow as an unqualified man. As to the charges of extracting teeth and inserting plastic fillings he asserted that it had long been a practice in the dental profession for unqualified assistants to do these things. He understood that a circular in opposition to this practice had recently been issued by this Council, but a copy of that circular had not reached Mr. Kershaw, though he might say that since the inquiry before the committee Mr. Kershaw had caused Mr. Neighbour to discontinue the practice. With regard to the chloroform case he might say that Mr. Kershaw was ill in bed when the summons came and he told Mr. Neighbour to go and see what could be done and make an appointment for him on another day. Mr. Neighbour found the patient, a young girl, in great pain and anxious on that account and because she wished to return to her employment to have the tooth extracted. Mr. Snow had also been called in and great pressure was put upon Mr. Snow and Mr. Neighbour by the girl herself and by her mother to have the operation performed. Yielding to this pressure Mr. Neighbour performed the operation and Mr. Snow administered the anæsthetic. When Mr. Neighbour returned to Mr. Kershaw and told him what he had done he, to use Mr. Neighbour's own phrase, "blew him up" and told him he ought not to have done it. He would put in the statutory declarations of three medical men of position who knew Mr. Kershaw and his patients to the effect that on no occasion had Mr. Neighbour extracted teeth in their presence when chloroform was administered without Mr. Kershaw being present. In all the circumstances he hoped the Council would be satisfied that Mr. Kershaw had not willingly been guilty of any conduct which could be described as infamous in a professional respect.

After the Council had deliberated *in camerâ*

The PRESIDENT announced to Mr. Kershaw that they had determined to adjourn the further consideration of the case until the next session of the Council. He had to point out to Mr. Kershaw that the Council regarded such professional dealings as had been brought to their notice in connexion with the case very seriously and that they had expressed their views on the subject in a notice which they had issued. A copy of the notice would now be given to Mr. Kershaw and he would have until November to reconsider his position in regard to the employment of unqualified assistants and when he came before them in November he would have to satisfy the Council upon the matter.

Reciprocity of Medical Practice.

The next business on the programme was the adjourned consideration of the report of the Executive Committee on the subject of the revision of the memorandum on Reciprocity of Medical Practice in relation to foreign countries. Exception was taken to certain portions of the revised memorandum and after a short discussion it was agreed to refer the whole matter back to the Executive Committee.

The Disciplinary Powers.

The next business was to receive the following interim report by the President on answers received from the medical authorities relative to increased penal and disciplinary powers.

INTERIM REPORT TO THE COUNCIL BY THE PRESIDENT ON THE STEPS TAKEN BY HIM TO SECURE INCREASED POWERS FOR PENAL AND DISCIPLINARY PURPOSES UNDER SECTION 29 OF THE MEDICAL ACT, 1858.

The PRESIDENT has to report that in November, 1898, in accordance with a request of the Executive Committee he addressed a letter to the medical licensing authorities in which he asked if they would be prepared to express approval of two draft clauses for the amendment of the Medical Act, 1858, copies of which were enclosed. At the meeting of the Executive Committee on Feb. 27th, 1899, the President reported that he had received answers to his letter from all the medical authorities with six exceptions. Four of the authorities approved of the suggested clauses, several others approved of Clause 1 but took exception to Clause 2, whilst some found matters in both clauses with which they could not agree. To meet the objections which had been raised the Executive Committee resolved that the President's interim report of Feb. 27th should be remitted to Mr. Muir Mackenzie and that he be requested to consider the objections taken and the suggestions which had been made by several of the medical authorities for the amendment of the clauses.

During the interval between the meetings of the Executive Committee on Feb. 27th and May 29th the six medical authorities which had not replied to the President's letter of inquiry at the first-mentioned date had forwarded their comments on the clauses submitted to them. The answers of these bodies left the question in much the same position as it was placed in by the earlier series of replies. The President embodied these in a second interim report presented to the Executive Committee on May 29th, and along with them amended clauses drafted by Mr. Muir Mackenzie to meet the objections which had been taken by certain of the medical authorities. After consideration the following resolution was adopted by the Executive Committee: "That the Executive Committee approve of the amended clauses drafted by Mr. Muir Mackenzie and request the President to forward them to the medical authorities before submitting them to the Council."

On the motion of Dr. MACALISTER, seconded by Mr. BRYANT, this interim report was entered on the minutes.

The PRESIDENT mentioned that he had asked the Registrar to circulate the two interim reports which were referred to in the interim report which the Council had just received, so that they would have the opportunity of reading what the views of the different medical authorities were on the proposed amending clauses submitted to them and they would also have the opportunity of reading the suggested clauses drawn by Mr. Muir Mackenzie for the purpose of meeting the difficulties. He should communicate with the various bodies when he had time to get the letter written.

Proposed Amendment of the Medical Acts.

The Council proceeded to hear a communication from the Privy Council Office in regard to an Amending Bill drafted by the Incorporated Association of Medical Practitioners presented to the General Council by the Executive Committee, together with a report thereon obtained by them from the legal adviser of the Council. These were as follows:—

(*a*) COMMUNICATION FROM THE PRIVY COUNCIL OFFICE.

Privy Council Office, Feb. 9th, 1899.

SIR,—Referring to previous correspondence on the subject of the proposed amendment of the law with a view to obtain penal and disciplinary powers in the case of persons whose names have, in certain circumstances, been erased from the Medical Register, I am directed by the Lord President of the Council to transmit to you, for the information of the General Medical Council, the accompanying copy of a proposed Bill which has been drafted by the Incorporated Association of Medical Practitioners for preventing persons who have been removed from the Medical Register under Section XXIX. of the Medical Act, 1858, from continuing to act as medical practitioners.

I am, Sir, your obedient servant,

A. W. FITZROY.

Sir William Turner,
President of the General Medical Council.

(*b*) ENCLOSURE.

AN ACT to prevent persons who have been removed from the Medical Register under the provisions of Section XXIX. of the Medical Act, 1858, from continuing to act as Medical Practitioners.

WHEREAS it is expedient that persons who have been removed from the Medical Register by the General Council of Medical Education and Registration under the powers conferred upon it by the Twenty-ninth Section of the Medical Act, 1858, should be prevented from continuing to act or practise as Medical Practitioners: Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same as follows:—

1. This Act may for all purposes be cited as "The General Medical Council (Additional Powers) Act."

2. This Act shall commence and take effect from the first day of September, 1898.

3. Any person whose name shall have been removed from the Medical Register by the General Council of Medical Education and Registration under the powers conferred upon the said Council by the Twenty-ninth Section of the Medical Act and who shall thereafter practise Medicine or Surgery, or Medicine and Surgery, as the case may be, in any part of the United Kingdom of Great Britain and Ireland, shall, upon a summary conviction for any such offence, pay to the said Council a sum not exceeding twenty pounds.

4. The General Council of Medical Education and Registration shall be entitled to receive all fines inflicted upon offenders convicted under Section 40 of the Medical Act, 1858.

(*c*) REPORT BY MR. MUIR MACKENZIE.

Penal and Disciplinary Powers.—Proposed Amendment Bill.

I have considered the Bill which has been drafted by the Incorporated Association of Medical Practitioners for the pupose of preventing persons whose names have been removed from the Medical Register from continuing to act as medical practitioners.

The provisions of the Bill are set out at pages 25 and 26 of the Minute of the Executive Committee of Feb. 22nd, 1899 (and above).

As regards the general principle of the Bill it is undoubtedly of a very stringent character. If passed into law its effect would be to make it a criminal offence for a person whose name had been removed from the Medical Register for misconduct to practise medicine or surgery in any way. The creation of such an offence would introduce an altogether new principle in the legislation which is embodied in the Medical Acts and would probably arouse very considerable opposition in Parliament. Expressing my own opinion, I could not advise the General Medical Council to support such a measure without very careful consideration.

As regards the details of the Bill, the points upon which I wish to observe are the following:—

The 3rd Clause provides that on a summary conviction the offender is to pay to the General Medical Council a sum not exceeding £20. The words of the Clause thus differ from those of Section 40 of the Medical Act, 1858, and seem to me open to objection on that ground. Next, there is no reference to midwifery in the 3rd Clause of the Bill. This seems to me to be open to objection.

Lastly, as regards the 4th Clause, it does not in my opinion adequately meet the difficulty which has arisen with regard to the payment to the General Medical Council of penalties inflicted under the Medical Acts. The difficulty which has arisen is that the metropolitan authorities contend that by virtue of the stringent terms of the Police Act, 1839, which provides that penalties imposed by any future Act of Parliament, when recovered in the metropolis, are to be paid to the Receiver of Police, that official is entitled to all the penalties recovered under the 40th Section of the Medical Act, 1858, in the metropolitan police courts. The clause in the proposed Bill is not framed, I think, in terms which would displace the contention of the metropolitan authorities, if that contention is a sound one.

On the whole, therefore, I do not feel that I can advise the General Medical Council that the proposed Bill is one which deserves the Council's support. (Signed) M. MUIR MACKENZIE.

4, Temple-gardens, E.C., May 11th, 1899.

Dr. MACALISTER moved that the communication from the Privy Council, along with the enclosure and the report on the proposed Bill by Mr. Muir Mackenzie, be entered on the minutes.

Mr. BRYANT seconded the motion.

The motion was agreed to.

Mr. BRUDENELL CARTER: We are not asked by the Government to give any opinion on this matter.

The PRESIDENT: No; it is only to supply us with information on the subject.

Mr. BRYANT asked whether it would not be well that the Council should have some information as to the nature of the society asking for the Council's action.

The PRESIDENT: The association referred to in this case addressed the Privy Council and the Privy Council sent us their communication. The association does not come directly to us.

Mr. BROWN: I think we should give some kind of reply to the Privy Council.

The PRESIDENT: We are not asked to.

Mr. BROWN said that he must express regret that the Executive Committee had not asked the Council to support such a measure as the one included in the communication, because he believed the proposed Bill contained clauses which the Council very much desired. He should have been much better pleased if Mr. Muir Mackenzie, instead of pointing out difficulties, had told the Council how to avoid the difficulties that were in the way. He should like to have some guidance in this matter. Although Mr. Muir Mackenzie did not offer them any guidance he was rather astonished to find that in the interim report of the President clauses were submitted for the recovery of fines in medical cases in the metropolitan police courts.

Dr. CHURCH rose to a point of order. He said there was no motion before the Council and Mr. Brown was introducing a subject which was not before them.

The PRESIDENT agreed that there was no motion before the Council.

Mr. BROWN suggested that the matter should go to the Executive Committee.

The PRESIDENT: No.

The subject then dropped.

The Apothecaries' Hall of Ireland.

Sir DYCE DUCKWORTH, chairman of the Examination Committee, presented reports on the inspection of examinations of the Apothecaries' Hall, Dublin, held in October, 1898, and in January and April of the present year. After reading portions thereof he moved that the reports be received and entered on the minutes.

Mr. BRYANT seconded the motion.

Mr. TICHBORNE said that he objected to the reports going on the minutes and he moved the adjournment of the debate.

This motion was agreed to.

The Council adjourned till Monday.

MONDAY, JUNE 5TH.

The Council met again to-day, Sir WILLIAM TURNER presiding.

The Examinations of the Apothecaries' Hall of Ireland.

The first business was the consideration of the motion brought forward by Sir DYCE DUCKWORTH on Saturday:—

That the reports of the Examination Committee on the inspection of the examinations of the Apothecaries' Hall, Dublin, be received and entered in the minutes.

Mr. TICHBORNE, the representative of the Hall, said he desired to object to this motion because he took exception both to the tone of the reports and to some of the matter they contained. The tone of the Examination Committee was antagonistic to this body and it appeared to him that all through these reports they were trying to make out a case against it. He submitted that the observations made by the committee were in several instances not borne out by the reports of the visitors, inspectors, and examiners, and he concluded by moving as a rider to the motion:—

That certain expressions and passages be omitted from the reports of the Examination Committee.

Dr. BRUCE seconded this proposal.

Sir DYCE DUCKWORTH denied that the committee had done more than discharge the somewhat difficult duty imposed upon them in connexion with the examinations of this body which in a sense was under the tutelage of the General Medical Council and he insisted that justification for everything said by the committee in their reports would be found in the reports of the visitors, inspectors, and examiners. Exception had been taken to the use of the word "solitary" before the word "candidate," but he considered it necessary to accentuate the fact that all this heavy machinery of examination was brought into play to examine a single candidate. It was no small matter this for the Council because in connexion with the examinations of this body during the last 15 months they had spent no less than £307 10*s.* 8*d.* As long as he was chairman of the committee he would take care that they did their duty without fear or favour and reported to the Council what they considered it their duty to report in the circumstances of the case.

Mr. HORSLEY said he desired to support the Examination Committee. He was sure the profession did not know that because the Apothecaries' Hall of Dublin wished to hold these examinations they were being taxed to this extent.

Dr. BRUCE said that whatever the cost might be this Council was bound to carry out the law.

The motion of Mr. Tichborne was put to the Council in three sections and each section was rejected by a large majority.

Sir CHRISTOPHER NIXON said he would like to know whether the Council were going to continue this large expenditure in view of the small return obtained from it. He quite agreed that the law must be carried out, but as practical men they must look for some result for the money they expended.

The PRESIDENT said that this was a matter which really was not before the Council.

Sir CHRISTOPHER NIXON intimated that he would give notice of a motion on the subject.

The reports were then formally received and ordered to be entered in the minutes.

The Standard of the Preliminary Examinations.

Sir JOHN BATTY TUKE presented the following interim report by the Education Committee on the proposal to raise the minimum requirements of the Council as regards preliminary examinations to the level of the senior and higher grade examinations.

On Nov. 29th, 1898, the following motion was agreed to by the Council:—

"That the Education Committee be requested to consider and report to the Council during the next session as to the earliest date at which, in their opinion, it will be practicable to raise the minimum requirements of the Council as regards preliminary examinations to the standard of the senior and higher grade examinations at present recognised."

The committee, being fully aware of the complexity of the subject of the reference, deemed it advisable to obtain the opinions held regarding it by various educational authorities and to lay them before the Council.

The following letter was accordingly sent to the bodies and persons connected with general and medical education whose names are contained in the Appendix, Section I.:—

Edinburgh, 20, Charlotte-square, Dec. 27th, 1898.

SIR,—The General Council of Medical Education and Registration is

desirous of raising considerably the standard of general education in Arts which it requires of students intending to prepare themselves for the medical profession. After the 1st day of January, 1900, it proposes for the purpose of the registration of such students at their entrance upon the professional course to accept no certificate of examination in the educational subjects prescribed by the Council's regulations which is given for a lower standard of attainments than that required for the junior local examinations of the English and Scottish Universities and the equivalent junior examinations held in Ireland. The Council and its Education Committee are, however, anxious to introduce, so soon as it is deemed practicable, a still higher standard of requirement represented by the senior local examinations of the several universities, the higher grade examinations of the Scottish Education Department, and the senior grade examination of the Intermediate Education Board of Ireland.

The Education Committee has accordingly been requested by the Council to institute inquiries in order to ascertain the earliest date at which such advance may be made, having in view the desirability on the one hand of materially improving the educational status of medical students, and on the other of avoiding such a diminution of the supply of candidates for the profession as would be detrimental to the public interest.

In the belief that the knowledge and experience at your command will enable you to give the committee assistance in determining the questions now under consideration I beg leave on its behalf to ask you to favour me with an early reply to the following inquiries, and to say that your reply, together with any communications on the general subject which you may see fit to make, will have the careful attention of the committee and of the General Council:—

1. Is it practicable within the next few years to require that all intending students of medicine shall have passed an examination equivalent in character and standard to the senior local and higher grade examinations?
2. If it is practicable, what is the earliest date at which the higher standard should be enforced?
3. What proportion of students would probably be precluded from entering upon a course of medical study (say, at the age of 18 years) if the junior examinations at present recognised should (say, in 1905) cease to be accepted by the Council for the purpose of registration?

Herewith are sent an extract from the report of the Education Committee adopted by the Council on Nov. 29th, 1898; a copy of the Council's regulations respecting the registration of medical students; and a copy of a table showing the results of preliminary examinations in 1897, compiled by the Registrar of the Council from such returns as have, in response to the Council's request, been supplied by the examining bodies. I am, Sir, your obedient servant,

JOHN BATTY TUKE,
Chairman of Education Committee of the General Medical Council.

*To*_____

The committee submit the replies already received. They find it impossible to comply with the request contained in the reference to report in May, 1899, as they expect to receive further communications and as they could not possibly collate the evidence before them and bring it to bear on the general question during the time at their disposal. Moreover, the committee believe that it is of the greatest importance to give the Council opportunity to study the various communications now submitted. Such study will enable the Council to appreciate the manifold difficulties which surround the whole subject. Without committing themselves to any expression of opinion the committee beg to indicate to the Council that, considering the various and important interests to be considered, the preparation of the report demands considerable time and attention and they accordingly trust that the Council will consent to extend the period of their reference.

The committee have come to the conclusion that in order to deal effectively with the questions raised by the communications contained in this interim report they must ask the Council to provide them with the means of obtaining expert assistance. They therefore recommend that for the current year a sum of £100 be placed at their disposal for this purpose.

The Council agreed to receive the report and have it entered in the minutes.

Sir JOHN BATTY TUKE, in moving its adoption, said that the Education Committee during the last six months had been endeavouring to carry out the reference made to them in November of last year. It was suggested that it would be of great assistance to get the opinion of various bodies and persons closely connected with general and medical education, and accordingly a circular letter was issued. To this letter they had received 44 answers. A certain number of bodies had not answered and he could not help expressing some surprise at the omission of certain of these bodies. But he might say that the 44 bodies and persons who had replied were representative of every interest concerned and the Council were under considerable obligation to them for the care and attention which they had given to the subject. The inquiries of the committee showed that the whole question was much more complex and difficult than appeared to certain of the members of the Council six months ago. A study of the answers received brought out the fact that there was a very wide divergence of opinion on the proposal made. On the one hand, they had opinions that it was practicable to raise the standard to the level of the senior and higher grade examinations in 1905 or even earlier, while on the other they had opinions that it was absolutely impracticable, at any rate, for many years to come. Between these two extremes they had various shades of opinion. As to those who held it to be practicable at an early date, without going into a detailed analysis of the replies, it was interesting to mark that those who were most confident upon the subject were the headmasters of schools and the heads of purely medical bodies—that was to say, bodies which did not deal with general and medical education conjointly. It was equally interesting to note that bodies which dealt conjointly with general and medical education sounded notes of warning. There were certain exceptions, but as a rule the universities sounded notes of warning. In the case of most of the universities doubt was thrown upon the practicability of immediate action; at any rate, they advised caution in action. He wished specially to draw attention to the replies received from the universities of Scotland inasmuch as these bodies had within a few years had the experience of a sudden raising of the standard of preliminary education and they had given the results of that experience. An important point was the raising of the age and the consequent reduction in the number of medical students. It was held by some of the bodies that the general tone and high standard of medical education existing in Great Britain and Ireland at this moment might drop if the number of students were reduced. Another point brought out by the replies was that the relative value of certain of the preliminary examinations accepted by the Council was not well defined and he might say that during the past six months the committee had been endeavouring to satisfy themselves upon this point. They had made application to various examining bodies to allow them access to the answers of candidates. They had applied to the Oxford and Cambridge Schools Examination Board, the Education Department for Scotland, the Scottish Educational Institute, and the Conjoint Board of the Irish Colleges. All these bodies had given them access to papers. The papers they asked for were 20 or 25 specimen papers of the lowest mark candidates—the men who in students' language just managed to scrape through. Members of the committee had examined these papers and formed their own individual opinion about their relative merits. No one could doubt that this was the only way to arrive at any estimate of the relative value of the examinations. But the committee felt that the inspection of papers should be undertaken by authorities in general education. However willing the Council might be to accept the opinion of members of the Education Committee, those members felt that too much responsibility would be thrown upon them if they were asked to undertake this duty. The committee felt that they could not come to a conclusion upon the general question without some expert assistance as to the relative value of the junior examinations and there were other matters in connexion with which expert assistance would be of the very greatest use. The plan of action would, it appeared to him, though it had not been actually recommended by the committee, be that they should appoint three men, one for each division of the kingdom, who as far as possible were unconnected with any interest involved and that to them should be submitted the regulations of the examinations of the various bodies in order that they should see whether they came within the requirements of this Council, and that they should apply again for the inspection of papers from the various bodies and forward these papers to the experts. It might be advisable that the experts should hold conference with the Education Committee, but whether they did or did not they would frame a report upon which the Education Committee could found a report to this Council. In this way he hoped the committee would be able in November to suggest a scheme by which a system of gradual raising of the junior examinations could be established such as would not leave much to be desired in 1905. But the committee felt that until they were supported by the opinion of such experts as he had referred to—until they were able to come to something like a definite opinion as to the relative value of many of the examinations—it would be extremely difficult for them to issue a satisfactory report to the Council. But backed up by such an opinion he believed they would be able to submit a scheme in November which would meet with very general acceptance.

Dr. MACALISTER formally seconded the motion.

The PRESIDENT said that he would venture to point out that this was only an interim report and to suggest that they should not now go into the question of analysis of the various communications received by the Education Committee but limit themselves to the two recommendations: one, that the period of reference should be extended, and

the other that the committee should be provided for one year with a sum of £100 to get the expert assistance suggested.

Mr. BRYANT said that as chairman of the Finance Committee he could see no objection to this very modest request on the part of the Education Committee.

The two recommendations in the form suggested by the President were put to the Council and at once adopted.

The Midwives Bill.

Sir RICHARD THORNE, as chairman of the committee, read the following report by the Midwives Bill Conference Committee on the Midwives Bill, 1899:—

In accordance with the resolution of the Council of Nov. 29th, 1838, "That the Midwives Bill Conference Committee be re-appointed [with the addition of Mr. Horsley] for the purpose of watching any legislation that may be proposed on the subject in the next session of Parliament," your committee have considered "A Bill to Promote the Better Training of Women as Midwives and to Regulate their Practice, 1899," which has been read a first time in Parliament, and they now beg leave to report as follows. A copy of the text of the Bill is hereto appended.

1. With reference to Clause 2 of the Bill they would recall the fact that in a report of the Council, April 6th, 1898, which was directed to be forwarded to the Lord President of the Council, the Council laid it down "that the term 'midwife' should be defined as meaning a woman who undertakes for gain to attend cases of natural labour and who is not registered under the Medical Acts." Clause 2 of the Bill of 1899 defines a midwife simply as a woman who undertakes for gain to attend women in childbirth.

Your committee hold it to be of fundamental importance that the words "natural labour" should be retained in the definition and they strongly urge this point for the following amongst other reasons:—

If the word "childbirth" is used without limitation it may well be held to confer on women not registered under the Medical Acts a statutory right to attend for gain cases of abnormality or disease in connexion with parturition. This is not only contrary to the public interest, but is inconsistent with Section 32 of the Medical Act, 1858, and of Section 6 of the Act of 1886.

Your committee hold strongly that a point which is of such vital importance should be expressly embodied in the statute and should not be left to be dealt with under rules which may be varied from time to time.

As regards the meaning of "natural labour" your committee are of opinion that the rules to be drawn up by the Central Midwives Board under Clause 5 (3) I (*d*) of the Bill can be fully relied on to deal with any difficulties such as, it is alleged, might arise on this point. It would be easy, for example, to specify the conditions indicating difficulty, abnormality, danger, or disease under which qualified medical assistance should forthwith be sought.

2. As regards the matter dealt with in Clause 3 (2) of the Bill your committee are of opinion that the Bill should contain a provision making it penal for a licensed midwife to employ as her substitute in attending for gain on a case of labour any person not licensed under the Act.

Sub-clause (4) of this clause should, in their opinion, be extended so as to prohibit the granting by a licensed midwife of any certificate relating to a death or stillbirth.

3. On Clause 4, your committee are of opinion that the requirement as to evidence of good character should apply to all applicants for "licence," and also that the clause should be amended so as to make all certificates purporting to be evidence of training and skill in midwifery subject to the approval of the Central Midwives Board.

4. With regard to Clause 5 (1) your committee resolved to disapprove of the proposed constitution of the Central Midwives Board, on the grounds that it should be more representative in character and should include registered medical practitioners who are familiar with the condition of midwifery practice in local districts throughout England and Wales.

As to sub-clause (2) of this clause they would further state that it is their opinion that all the members of the Central Midwives Board should be registered medical practitioners.

With regard to sub-clause (3) they would observe on (*a*) that they are of opinion that it should be made clear that the rules passed by the Central Midwives Board are not to be valid unless and until they have been approved by the General Medical Council; and on (*b*) that, in their opinion, the paragraph should run as follows: "regulating the course of training and the conduct of examinations" to be required for a "licence."

5. In Clause 7 of the Bill your committee are of opinion that the term "qualifications" should be avoided as being likely to lead to misapprehension and that it should be replaced by the term "conditions," which is used in Clause 5 (3) I (*a*).

6. On Clause 9 the committee would express the opinion that the local sanitary authority, which is primarily concerned with questions affecting the prevention of disease, including puerperal fever, should take part in the local administration of any Act relating to midwives. Modification of the Bill in this sense would involve corresponding modification of the financial and other clauses of the Bill.

7. At this point they would also call attention to the imperative necessity of making provision for qualified medical assistance in every case attended by a midwife which presents symptoms of difficulty, abnormality, danger, or disease on the part of the mother or of the new-born child. As regards this matter they would call attention to report of the Council of April 6th, 1898, paragraph (10), and to the concluding paragraph of the report by the committee appointed by the Council to confer with delegates from the Midwives Bill Committee, Nov. 22nd, 1898.

8. With regard to the concluding paragraph of the Bill your committee are of opinion that a small fee should be charged on each occasion of the annual renewal of the "certificate."

9. They are further of opinion that the misdemeanour referred to in Clause 11 (*a*) of the Bill should relate to both the "licence" and the "certificate."

10. On Clause 12 the committee would observe that in their opinion the misdemeanour as to falsification should include "any person" and should not be limited to the person appointed to keep the roll.

11. On the Bill generally your committee would further observe:—

(*a*) That the term "licence" should throughout be restricted to the permission granted by the local supervising authority to practise in a given area, and that the document granted by the Central Midwives Board should be termed a "certificate" entitling the possessor to be placed on the Midwives Roll and thereby testifying to her competence to receive a local "licence." This change will involve certain consequential modifications in many of the clauses of the Bill.

(*b*) That they assume that before any Bill regulating the training and practice of midwives is passed into law provision will be made by Parliament for covering both the general and special expenses which the Council and any committee appointed by them will have to incur in the performance of any duties that may be imposed on them under that law.

The committee accordingly recommend: That the Council inform the Lord President of the Privy Council that they are unable to approve the Bill unless it is recast in accordance with the suggestions made in this report.

The report, on the motion of Sir RICHARD THORNE, seconded by Dr. MACALISTER, was received and entered on the minutes.

In answer to the PRESIDENT,

Sir RICHARD THORNE said that he did not intend to move the adoption of the committee's recommendation. He could not do so for this reason, that there was a very important clause in the report in regard to which when it was put before the committee he was in the minority.

Mr. HORSLEY said that if it was to put the Council in order he should be very happy to move the adoption of the report because he felt most strongly that it should go to the Privy Council.

Sir CHRISTOPHER NIXON, another member of the committee, agreed to second the motion for the adoption of the report.

Sir RICHARD THORNE did not think any advantage would accrue from the representation of medical practitioners for local districts and he was distinctly of opinion that any central midwives board that might be formed should have in it something of the lay element.

Dr. MACALISTER, as another member of the committee who was in the minority in which the chairman had found himself, contended that if the Council adopted Section 4 of the report which was now before them they would be going beyond the Council's previous policy on this question, and if they spoke to the Privy Council in the sense of the report they would minimise their influence with the Council.

Mr. BRUDENELL CARTER was inclined to think that if the Bill passed one of its early effects in many localities would be to prevent women now practising continuing to do so and it would be quite sure to excite in many localities certain feelings of sympathy—certain feelings that the women were being subjected to hardship. Under such circumstances he could not help feeling that there should be a non-medical element on the Midwives Board. The Government might follow the example in the Medical Act in constituting any such central board for midwives as that proposed. At the same time he thought that it would be unwise for the Council to adopt the report of the majority of the committee.

Dr. LOMBE ATTHILL said that he had considered this report with very great care and as one who had had midwives under his care for the greater part of his professional life he wished to say that he thought the report was very satisfactory. He was thoroughly in accord with Mr. Carter and other speakers that there should be a non-medical element on any central board which might be formed. He also thought that this proposed board was very much superior to that in the other Bill, which proposed that there should be a number of ladies and the representatives of certain bodies which had no charters of incorporation. The smallness of the proposed board was a recommendation. He thought it would be a very great mistake for the General Medical Council to disapprove of Clause 5 of the Bill, for he feared that if the board was to be entirely a medical board it would be looked upon as a partisan board.

An endeavour was made to arrive at an understanding. It was moved by Mr. HORSLEY and seconded by Sir CHRISTOPHER NIXON:—

That the report of the Midwives Bill Conference Committee on the Midwives Bill, 1899, be adopted and that the Council do inform the Lord President of the Privy Council that they are unable to approve the Bill unless it is recast in accordance with the suggestion made in this report.

As an amendment it was proposed by Sir RICHARD THORNE and seconded by Dr. MACALISTER:—

That the Council withhold its approval from the first two paragraphs of Clause 4 of the report and that the communication to the Lord President of the Privy Council be modified accordingly.

Mr. HORSLEY wished to speak with reference to this amendment. He did not object to the introduction of the lay element but he thought that if the body was to be a small one there would be danger in introducing the lay element. As the clause objected to had been carried by a majority in the committee he ventured to hope that it would be carried by a majority in the Council.

On a division the amendment was carried by 17 votes to 10, and when put as a substantive motion by 16 votes to nine.

Dr. MACALISTER moved that the report as amended by the deletion of the first two paragraphs of Section 4 of the report should be sent to the Privy Council.

This proposal was unanimously agreed to.

The following further report from the Midwives Bill Conference Committee was read by Mr. ALLEN, the Registrar:—

(*a*) The Midwives Bill Committee have had under consideration a memorandum, &c., by the British Medical Association on the Midwives Bill referred to them by the President of the Council and they beg leave to suggest that the British Medical Association be thanked for their communication and enclosures and that they be informed that the committee of the Council, in drafting the report on the Midwives Bill which they have submitted to the present session of the Council, have had regard to the principal matters embodied in the memorandum and Draft Bill of the Association, and that the Association will find that many of their suggestions find support in the report of the committee.

(*b*) The Midwives Bill Committee have had under consideration a memorial from the British Gynæcological Society with reference to the Midwifery Bill referred to them by the President of the Council and they beg leave to suggest that the following reply be sent:—

That the memorial be acknowledged with thanks and that the British Gynæcological Society be informed that the successive reports of the committee to the Council will show that the considerations set forth in the memorial have continually been kept in view by the committee.

(*c*) The committee have also considered a report of March 6th, 1899, forwarded by the Royal College of Surgeons of England and submitted to them by the President of the General Medical Council.

The committee report that the matters referred to in the report of the College have received their consideration and that they believe the report which they have presented to the Council during the present session contains evidence that they have felt it their duty to direct the attention of the Council to the majority of the points adverted to in the report of the College.

Sir RICHARD THORNE said that the foregoing was the answer that it was proposed to send to the memorialists. He moved that the report be received, entered on the minutes, and adopted.

Dr. MACALISTER seconded and the motion was agreed to.

Diploma in Public Health.

Sir RICHARD THORNE, on behalf of the Public Health Committee, submitted a report on the regulations for the Diploma in Public Health of the University of St. Andrews, and on his motion, seconded by Dr. MCVAIL, the report, which was as follows, was received, adopted, and entered on the minutes:—

The Public Health Committee having had referred to them by the President the regulations for the Diploma in Public Health forwarded to the Council by the University of St. Andrews beg leave to report as follows:—

1. They would point out that whereas the rules adopted by the Council on June 9th, 1896, require that a period of not less than 12 months shall elapse between the attainment of a registrable qualification in medicine, surgery, and midwifery, and the admission of the candidate to any part of any examination for the diploma, it is by no means clear that this condition is required under the regulations for the University of St. Andrews.

Rule I. requires that this interval of 12 months shall elapse before entering upon *the* "Examination for this Diploma." There are, however, two examinations, and whereas under Rule II. a candidate need only have attended one of the two six months' courses required under the rules of the Council before entering on this first examination, it is clear from Rule III. that the second of the two six months' courses need not be followed until the candidate proceeds to the second examination for the diploma.

The wording of these two rules in relation to the requirement of the Council is, to say the least, ambiguous; and in view of the fact that the candidate is definitely informed that he can enter upon one part of the examination before he has even commenced the second of the two courses of six months' study required by the Council, your committee are of opinion that it should be made clear in Regulation No. I. that no candidate can present himself for *any part* of the examination until not less than twelve months have elapsed since the attainment of a registrable qualification under the Medical Acts.

2. Whilst admitting that the Regulation No. IV. which deals with the subjects of the examination is satisfactory when read together with the Appendix to the Regulations, the committee are of opinion that, since definite mention is made in the Regulation No. IV. of such subjects as chemistry, physics, and meteorology, it is to be regretted that this regulation contains no reference whatever as regards either the written, oral, or practical part of the first examination, to the subject of bacteriology, to which prominence is given in the rules of the Council.

3. It is stated in Regulation No. IV. that the second examination shall "as far as possible" embrace practical as well as written and oral tests. The committee are of opinion that no such examination can be regarded as satisfactory which does not necessarily include a practical examination into the candidate's knowledge of the outdoor work of a medical officer of health. In this connexion the committee would recall Conclusion No. 7 of the first report of the Public Health Committee, Nov. 29th, 1895, which is as follows:—

"We are of opinion that practical examination in the outdoor work of a medical officer of health, including a test of ability properly to interpret plans, should form part of every examination for a diploma or certificate in public health."

4. Having regard to the general efficiency of the scheme as formulated by the University of St. Andrews the committee are of opinion that there would be advantage in asking the University to reconsider their regulations in the sense of this report.

In moving that this report be adopted Sir RICHARD THORNE announced that the University of St. Andrews had authorised their representative on the Council to make such verbal alterations in the regulations as, in the opinion of the committee, fully met the points raised in their report. In the amended form in which they were now submitted the committee had no objection to raise to them.

On the further motion of Sir RICHARD THORNE, seconded by Mr. TEALE, it was agreed that the reference to the committee on the subject of outside work should be continued.

Medical Aid Associations.

Dr. GLOVER presented the report of the Medical Aid Associations Committee and moved that it be received by the Council and entered on the minutes.

Mr. TEALE seconded and the motion was agreed to.

The report is as follows:—

The committee would, by way of preface, remind the Council that in 1893 a report on medical aid associations was presented by a committee of the Council and was discussed on May 26th, when the following resolutions were arrived at:—"(1) That the following rules, already laid down by the Council as to 'covering' unqualified assistants, do apply to medical officers of medical aid associations in respect of any unqualified persons whom an association may have engaged to assist them: Rule (*a*) 'That the Council record on its minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act.' Rule (*b*): 'A registered medical practitioner would render himself liable to the censure of the Medical Council in case of the employment of an unqualified assistant in the practice of medicine, surgery, or midwifery on behalf and for the benefit of such registered practitioner, either in complete substitution for his own services or under circumstances in which due personal supervision and control are not, or cannot be, exercised by the said registered practitioner.' (2) That the investigation by the committee of the question of the conduct of medical aid associations has not disclosed the prevalence of any offences with which it falls within the statutory province of the Council to deal; but that the report of the committee with reference to certain evils which it describes cannot fail to be instructive to the Executive Committees and medical officers concerned and that the President be requested to transmit copies of the report to these committees and officers."

The committee are now able to report to the General Medical Council the result of their labours in discharge of the duty imposed on them by the following resolution of the Council passed May 31st, 1897: "That the communications in regard to medical aid associations received by the Executive Committee on May 24th, 1897, be referred to a committee consisting of the following members: Mr. Teale, Dr. Glover, Dr. Bruce, Dr. Rentoul, Mr. Bryant, and Dr. Church."

One of these communications was in the form of a memorial presented to the General Medical Council by a deputation appointed at a meeting of the medical men of Norwich. It expressed the desire of the memorialists to have the opinion of the Medical Council on the question of professional intercourse with the medical officers of the Norwich Medical Institute. At the meeting of the profession in Norwich a committee was appointed to consider the relation of the Medical Institute to medical aid associations, and the committee reported "that the institute is a trading society, conducted by laymen, for affording medical attendance in return for a small annual subscription (3*s.*), only a portion of which is paid to the medical officers, the remainder going to defray the working expenses, and the balance is appropriated for investment in the acquirement of real property. The committee considered that the four conclusions summarised in the report of the General Medical Council on the evils of medical aid associations are in every case applicable to the Norwich Medical Institute, and were unanimously of opinion that it is unbecoming and unprofessional for any member of the profession to lend his name or to associate in any way with such a society."

The report of their committee was unanimously adopted by the medical men in Norwich, and the memorialists sought the advice and guidance of the Council on the question of meeting in consultation medical men who had undertaken duties on conditions which must be considered detrimental to the public and derogatory to the profession.

The second communication was received from the Norwich Medico-Chirurgical Society, composed of medical men residing in Norfolk and Suffolk, desiring the General Medical Council to take steps to counteract the growing evils of medical aid associations and of medical institutes, and pointing out that the formation of such institutions in Norwich and at Great Yarmouth had attracted the attention of the profession in East Anglia.

The members of the Norwich Medico-Chirurgical Society resolved (*nem. con.*) to decline professional intercourse and consultation with the medical officers of these institutions, and in their communication to the Council directed attention to the step they had taken.

A third communication from the Beckenham and Penge Medical Society addressed to the President of the General Medical Council simply reported the fact that at a meeting of the society it was unanimously resolved that "the holding of a medical appointment to so-called medical aid societies be considered derogatory to the profession and inimical to its best interests."

Other communications bearing on this subject have been referred from time to time by the Council to the committee, which presented an *ad interim* report in 1897 and two *ad interim* reports in 1898. The committee was re-appointed on Nov. 30th, 1897.

The delay of two years in reporting any definite result is partly explained in the *interim* reports just mentioned. The time has been occupied by the committee in inquiring into the causes of friction between medical aid associations consisting of members of friendly societies and the medical profession. It may seem long, but will appear less so when the great difficulty of the questions raised by the memorialists is considered, as well as the number and scale of the friendly societies which have organised associations for supplying medical aid to their members.

The committee have had the advantage of receiving a deputation from the practitioners of Norwich and Yarmouth, and discussing with them in much detail the causes of the dissatisfaction very naturally felt by them and expressed in their memorials. On the suggestion of Mr. E. W. Brabrook, the registrar of friendly societies, conveyed through the President of the Council, the committee has had two interviews with a sub-committee appointed by the leading friendly societies. The last of these was a formal conference. Printed reports of the last conference with the representatives of the friendly societies have been distributed to the members of the Council, and throw a pretty full light on the matters in dispute.

These resolve themselves very much into questions of remuneration, arising largely out of the recent inclusion in the membership of medical aid associations of women and children who hitherto have been generally excluded from the club system and out of an alleged practice of retaining in the membership of such association persons whose means and social circumstances unfit them, without injustice to the profession, for receiving the benefits of medical attendance on such terms as are proper for ordinary members. The committee is of opinion, after due inquiry, that there is no disposition on the part of the friendly societies to deny the reasonableness of much of this dissatisfaction, nor any want of wish that their medical officers should be adequately remunerated. With this purpose various suggestions have been made by the committee to the authorised representatives of the friendly societies, the most important of which is a proposal for a conciliation board consisting of representatives of the friendly societies and of the medical profession to determine questions at issue.

The proposal for a conciliation board has been cordially accepted by the representatives of friendly societies after full discussion by their various constituencies. The acceptance was intimated in a letter to the chairman of the committee on April 15th last by Mr. J. E. Cleveland, of the National Independent Order of Oddfellows, who says: "I am pleased to inform you that at the meeting of the National Conference of Friendly Societies, held in London on Thursday last (April 13th), it was unanimously resolved that the members of the committee who were previously appointed to confer with that of the General Medical Council should be elected as the representatives of the friendly societies upon the proposed conciliation board with the members of the Council."

The committee cannot but think that the creation of such a board with the full sanction of the profession on the one hand, and of the great friendly societies on the other, would be an important step towards the establishment of a better understanding between these bodies and the medical profession. The creation of a good conciliation board would pave the way for a more thorough discussion of all the questions at issue, and would, the committee believe, lead to the more adequate remuneration of medical work, and the better medical treatment of the members of the friendly societies. The question of such a board of conciliation is one for the consideration of the profession, and in the judgment of the committee cannot be settled by the Medical Council itself.

It should be clearly stated that all that has been said so far refers strictly to associations composed essentially of members of friendly societies and their families who belong, with few exceptions, to the industrial classes and do not employ paid canvassers. The chief purport of this report is to commend the scheme of a conciliation board to the favourable consideration of the General Medical Council.

The committee suggest for adoption by the Council the following resolution:—

"That the Council approve of the recommendation of the committee in favour of the formation of a board of conciliation, to consist of representatives of the friendly societies and of the medical profession."

The committee since its formation has received communications with reference to another class of medical aid associations—viz., those established by insurance or other commercial companies in which insurance is the principal business and medical attendance is thrown in merely as a bait. It is alleged that wholesale canvassing and touting is practised by these associations. The general tenour of the complaints made to us is that canvassing on a large and promiscuous scale is practised and that in some quarters practitioners have been driven to employ similar methods in self-defence. The committee cannot doubt that in the nature of the case this is the general working of a medical aid association, promoted to push insurance business and to yield profit to a commercial company. They have reason to believe that a large number of medical men are engaged to such associations. They venture to suggest to the Council that the evil is great enough to justify the expression of strong disapproval by the Council of touting and advertising for the purpose of procuring patients in the medical aid department and of any sanction to such methods by registered medical practitioners.

The committee suggest the following resolution for adoption by the Council: "That the Council strongly disapprove of medical practitioners associating themselves with medical aid associations in which touting and advertising for the purpose of procuring patients are practised."

Dr. GLOVER, in moving the adoption of the recommendation of the committee in respect to the formation of a conciliation board, said that he felt that this subject was not entirely medical—not entirely and severely within the care or purview of the General Medical Council if they were to take a very strict view of the limitations of the functions of the Council—but the Council would remember that they were requested to enter upon this subject by medical men in Norwich, Yarmouth, and Beckenham and that these gentlemen represented the whole of the profession on this subject. He might, by the way, say that the conference which the committee had held in the Council chamber with delegates representing the friendly societies was a conference with gentlemen who represented almost entirely friendly societies and such associations as were made up almost exclusively by members of friendly societies. He wished to impress on the Council the fact that on this matter they were dealing with *bonâ fide* friendly societies. The bulk of the members of these friendly societies were working men. They were so to the extent perhaps of 99 per cent. and most of them were members of the medical aid associations. The committee had a most amicable discussion with the friendly society delegates, and he must say that these gentlemen admitted very frankly that the terms on which medical men did the work of these societies were not satisfactory. There was a most friendly disposition on both sides to come to some understanding. The friction had been very great and the representatives of all parties seemed to wish for an understanding on the subject. Accordingly the main proposal in the report was that there should be a board of conciliation. This had been received with favour: as a matter of fact the proposition had been received in the most complete way by the friendly societies. The proposal was of a rather unusual character. It would be necessary to get the consent of the Council to it and possibly the Council might think fit to take the opinion of the profession upon it. The matter had been referred to the committee, of which he was chairman, and it was the business of the committee to try to do something so as to put the whole question of the attendance of medical practitioners on members of medical aid associations on a proper footing. The committee were trying to remove the causes of disagreement, and to avoid the consideration by the Council of the cases of practitioners who might enter into engagements with these medical aid associations and who might be accused of acting unprofessionally. He did not see any chance of a proposal better than that for a conciliation board, and he did not see any hope that in the future, if the Council proposed to deal with this question, there was any other way to deal with it. The proposal was that there should be six representatives of the medical profession—not of the General Medical Council—and six members of the friendly societies, with a chairman in addition. He hoped that the Council would accept the proposal, as he believed it was a step in the right direction. The proposal, in his view, was the most practical one that could be made on the subject. Supposing it failed, the Council would still be keeping the profession in the right position if they said: "By all means let us have this conciliation board." He believed that the public, the House of Commons, and every authority to which they could appeal would say that the Council were doing right. Whether it would succeed or fail remained to be seen but he believed that the Council would be using their influence properly if they agreed to the motion which he now made and adopted the recommendation of the committee, namely:—

That the Council approve of the recommendation of the committee in favour of the formation of a board of conciliation, to consist of representatives of the friendly societies and of the medical profession.

Dr. BRUCE seconded this motion.

The PRESIDENT said he wished to call the attention of the Council to the fact that the report included two things. It included the question of these friendly societies which Dr. Glover had already referred to and it included another class of societies. The discussion should at present be limited to the friendly societies.

Mr. HORSLEY said that he felt himself in a position to vote against the proposal. He had several reasons for assuming this attitude. In the first place, it was perfectly clear that many of the members of the Council had not been able to find time to peruse the documents connected with the conference and the Council ought not to come to any decision without having full knowledge of the documentary evidence laid before them.

The PRESIDENT: When did you circulate the report?

The REGISTRAR: More than a month ago.

Mr. HORSLEY: But it is quite obvious that members have not had time to read it.

Dr. GLOVER: The conference was held last year.

The PRESIDENT: But the report was circulated only a month ago.

Mr. HORSLEY: At any rate, I state that as a fact. Proceeding, Mr. Horsley said that the next point was that the proposition by the committee took the Council almost beyond their province. The work which the Council had to do was laid down by the Medical Acts and the Council had no permission to dictate to the profession what was to be the duty of it. They might suggest and if this was to be a suggestion only then there was not so much to object to in it. Still, the Council were the head of the medical profession and because of that it behoved them not to agree to any motion which would imperil the dignity or curtail the proper functions of the Council. Now, if they were to make a suggestion of the kind in question to the profession the profession would naturally ask if they had examined into the circumstances in which they proposed to enter into conference. Would the wage limit be discussed? On behalf of the friendly societies it had been stated that it would be impossible for them to discuss the wage limit. Why, then, should the profession go into this with their hands tied? The matter altogether was a very difficult one and would require much further consideration from several points of view. In the meantime his opinion was that this board of conciliation could have no useful outlet for its work and he wished the Council if they went to a vote to negative the proposal.

Mr. BROWN said that while he agreed generally with all that had fallen from Mr. Horsley, he at the same time thought that if a board of conciliation were formed upon which the members of the medical profession were largely represented and could confer with the managers of the friendly societies it might be possible to bring about a *modus vivendi* that would prevent the necessity of the intervention of the General Medical Council. The recommendation in operation might prove to be a throwing of oil on the troubled waters. He thought the proposed board deserved a trial and if it were found that it did not answer it could be dropped at any time.

Mr. BRUDENELL CARTER was of the opinion that the adoption of the recommendation might do a great deal of good. The proposed board could not do any harm. That Council had no power to prevent any man from selling his skill or services on any terms that might seem good to him, but he thought the Council might say to the profession that the best thing they could do would be to go into conference with the friendly societies and thresh out with them in a friendly way their respective difficulties.

Mr. BRYANT'S view was that nothing but good could result from the deliberations of a conciliation board. The societies represented at the conference numbered 33, and these had an aggregate membership of 3,500,000 and a capital of £23,000,000 sterling. Since that conference he had had the opportunity of meeting the Chief Registrar of Friendly Societies who regarded a conference between the representatives of friendly societies and of the medical profession very hopefully and with evident satisfaction, and he trusted that the General Medical Council would do their best in support of the proposal.

Dr. LEECH supported the recommendation because he was of opinion that a board of conciliation such as was proposed would do good to the medical profession, but a great deal more good to the friendly societies. It would be a great disappointment if the Council did not accept this recommendation.

Mr. TEALE wished to tell the Council that he was greatly struck by the tone of the gentlemen from the friendly societies who met the committee of the Council, by their statesmanlike policy and their generous appreciation of the work of the medical profession, and also by their real desire to do what was fair as between their own associations and the medical profession so as to bring all matters in dispute to a friendly termination.

Sir RICHARD THORNE thought that he ought to oppose the formation of this conciliation board until he knew how it was going to be constituted. Seeing that the Council had to deal with offenders under the Medical Acts he was of opinion that having regard to their statutory responsibilities no member of the Council should take any part in the constitution of the proposed board.

Dr. MCVAIL could not see in what way the opinion of the profession on this subject could be ascertained. How were they to obtain the five or six medical representatives. There was no question that if the General Medical Council proposed them the medical profession would repudiate them.

Dr. BRUCE pointed out that if the General Medical Council could not go the length of appointing the medical representatives to a conciliation board, if they agreed to the principle of such a board they would be taking a large step forward. He agreed with Dr. Glover that there was a great disposition to come to terms.

Sir DYCE DUCKWORTH said that whatever vote the Council should give he would regard it as only an academic vote. He hoped that the Council would take no active part whatever in the matter.

After some remarks by Sir CHRISTOPHER NIXON,

The PRESIDENT said that the last speaker wished to dissociate himself from the present proceedings as something outside the powers of the Council as laid down by Acts of Parliament, but he wished to remind members that it was not the Council that raised this question, for the question was raised by certain members of the profession who sent to the Council memorials and practically asked them to adjudge those members of the profession who acted in connexion with these associations to be guilty of infamous conduct in a professional respect. It was only right that the Council should endeavour to arrive at such a conclusion as would bring the friendly societies and the medical profession into harmonious action. The committee had done their best to accomplish that and he must say that he would have listened to the opposition to the recommendation of the committee if they had put forward any alternative proposal. He, however, had not heard a single argument against the committee's recommendation which had been convincing to him. All that the Council was now asked to do was to agree to the principle of the formation of a board of conciliation. If they so agreed, that would go out to the profession. The Council was not at this time asked to determine who were to be the medical representatives on the board. That was something which was not proposed at present. They might lead in the matter, but they must remember that they could not drive the friendly societies, who were certainly very powerful institutions—powerful numerically, and in connexion with the electorate, and in the influence which they could exercise at elections. And if the Council could by the adoption of the principle of the proposed conciliation board bring the friendly societies into harmonious coöperation with the medical profession he felt sure that the Council should have done a great act at this meeting.

Mr. HORSLEY pointed out that he had offered a practical solution of the difficulty of the moment. He had asked Dr. Glover to postpone this matter in order that the members of the General Medical Council who were not perfectly familiar with the matter should have an opportunity to consider it.

The PRESIDENT: I do not consider that a practical proposal.

Sir RICHARD THORNE, seconded by Mr. TOMES, moved a rider to the effect—

That having regard to the statutory responsibilities which devolve on the General Medical Council it was very inexpedient that any member of the Council should take part either in the constitution or decisions of the proposed conciliation board.

Some conversation ensued as to how this and Dr. Glover's proposal ought to be put to the vote. The PRESIDENT thought for a time that the two might be combined in a single motion, but objection being taken, Dr. MACALISTER suggested that the principle of Sir Richard Thorne's rider should be added to Dr. Glover's motion as a proviso in the following terms:—

Provided it is understood that, having regard to the statutory responsibilities of the Council, it is inexpedient that it should take part officially in the formation of the board.

Dr. GLOVER and Dr. BRUCE agreed to accept this proviso.

The Council then voted for the amended proposal when 19 members voted for it and none against it. A demand was made for the names with the result that on the roll being called it was found that 20 were in favour of the proposal, while eight did not vote and two were absent.

The amended motion as agreed to is as follows:—

That the Council approve of the recommendation of the committee in favour of the formation of a board of conciliation, to consist of representatives of the friendly societies and of the medical profession, provided it is understood that having regard to the statutory responsibilities of the Council it is inexpedient that it should take part officially in the formation of the board.

The names of those who voted for the motion and those who did not vote were as follows:—

For (20): Dr. MacAlister, Mr. Bryant, Sir Dyce Duckworth, Dr. Pettigrew, Dr. Church, Mr. Tomes, Dr. Heron Watson, Sir William Gairdner, Mr. Brown, Mr. Tichborne, Dr. Glover, Mr. Teale, Dr. Bennett, Dr. Philipson, Dr. Reid, Dr. Cameron, Dr. Leech, Dr. Bruce, Mr. Carter, and Sir John Tuke.

Did not vote (eight): The President, Dr. Atthill, Sir Richard Thorne, Dr. McVail, Sir C. Nixon, Sir William Thomson, Sir Philip Smyly, and Mr. Horsley.

Absent (two): Dr. Pye-Smith and Dr. Little.

The discussion of the remainder of the report was postponed till Tuesday's meeting.

The Council adjourned.

TUESDAY, JUNE 6TH.

The Council resumed work to-day, Sir WILLIAM TURNER presiding.

Medical Aid Associations.

The Council proceeded with the discussion of the report of the Medical Aid Associations Committee.

The PRESIDENT said that he had called the attention of Dr. Glover (the chairman of the committee) to the fact that his motion was in the position of what Sir Dyce Duckworth had called a pious opinion and that he had not suggested any means of taking action upon that opinion. He believed that Dr. Glover had now a further motion to propose.

Dr. GLOVER said that he proposed to move that a copy of the resolution passed yesterday be forwarded by the chairman of the committee to the various bodies and persons who had memorialised the Council on this subject.

Dr. MACALISTER suggested that it should also be sent to the friendly societies and in the first place to the executive body of the great conference of the friendly societies.

Dr. GLOVER expressed his assent to this suggestion.

Sir RICHARD THORNE asked whether there was any precedent for a chairman of a committee doing an act of this sort on behalf of the Council.

The PRESIDENT replied that no precedent occurred to him.

As the result of some further discussion it was agreed to hold this particular matter over till to-morrow in order that a resolution might be put into form.

Dr. GLOVER then moved the adoption of the second recommendation of the committee:—

That the Council strongly disapprove of medical practitioners associating themselves with medical aid associations in which touting and advertising for the purpose of procuring patients are practised.

He explained that in the first part of the report the committee dealt with the friendly societies, while in the second part they dealt with a different class of medical aid associations—namely, those which for the most part were promoted by commercial companies, generally of the insurance order, and who tagged on to the insurance business a medical aid department. The method by which these companies worked was essentially one of touting and advertising in a very marked degree. As a rule the friendly societies did not canvass, but these companies did business by going from door to door. Dr. Glover then read to the Council a number of documents which he had received from various quarters which illustrated the methods of touting and advertising pursued by the companies and concluded by recommending the motion to the Council as containing a moderate and practical proposal.

Dr. BRUCE formally seconded the motion.

Mr. BROWN who had on the programme a notice of motion to this effect—

That this Council regards it as unprofessional to hold the appointment of medical officer to any society established for the purpose of providing medical aid to its members whose agents systematically canvass for members from door to door—

said that in his opinion the motion proposed by Dr. Glover was not strong enough. He thought the action of the Council would have more effect if they declared that this conduct was "unprofessional." He spoke with some knowledge of these associations, for in the first year of his practice he was induced by an agent of one of them to allow his name to appear on the list of its medical officers. The district was a working- and middle-class district in the north of London and the agent pointed out the advantage it was to the poor to get good medical advice at a merely nominal figure. He was a young and somewhat enthusiastic surgeon then and he accepted the appointment. But what did he find? Why, in a few weeks this very man was going about the district and among his own patients asking them to join "Dr. Brown's club at a penny per week." He at once took steps to dissociate himself from the society and never again had he had anything to do with such an organisation. In this matter they ought to protect the profession and they ought to protect the public. The medical officers were called upon to attend patients in such numbers and at such fees that it was perfectly impossible for them to do justice to the patients and the public undoubtedly suffered in consequence. There were, of course, clubs and clubs. The general practitioner had nothing whatever to say against the ordinary friendly society composed exclusively of working men who paid such a fee as medical men throughout the country generally thought fairly adequate for their services. Indeed, medical men in the best class of practice in country towns and rural districts found a club practice such as he had indicated was really the backbone of a general practice, for it was an introduction to a private practice. These practices were considered very much more valuable and more transferable when they had a good sprinkling of club patients. But the thing they had now to deal with was something quite different. Here they had people pestered to join these societies by a succession of agents, male and female, and he said that it was the duty of the Council to interfere for the protection both of the profession and the public.

Mr. HORSLEY expressed a preference for the motion standing in the name of Mr. Brown.

Dr. PYE-SMITH expressed the same preference. As for the word "touting" it was scarcely English and although it was supposed to be expressive no one knew exactly what it did express and he suggested that "soliciting" would be a better word to use.

The PRESIDENT suggested the expression "systematic canvassing."

Dr. MCVAIL said he would like to know whether the Council intended to take action in this matter. He would like to know whether next November or next May they intended to proceed against practitioners who did the thing complained of. If they did not intend to take action then they should not pass this resolution which would only be the expression of a pious opinion.

Mr. TICHBORNE said he favoured Mr. Brown's motion declaring that this conduct was unprofessional.

Sir JOHN BATTY TUKE said that he would like to get some assurance that this was not the first stage in the construction of a new crime. They were certainly wasting time if they were merely going to say that this or the other thing was very naughty.

Dr. GLOVER, replying on the whole debate, said he was perfectly willing to substitute for "touting" the words "systematic canvassing," although he considered the former a very expressive and well-understood word. As to whether this motion was a piece of piety or a piece of resolution he said that so far as he was concerned it was a piece of intention and resolution, and he thought that the words of the motion were quite sufficient to give notice to practitioners that if they lent themselves to such a system as he had illustrated and evidence was produced before the Council of a clear and satisfactory character, showing their implication in it, that the Council would be prepared to use their disciplinary powers. In doing so they should be supporting a long and strong tradition of the profession. He would remind the Council that they had the opinion of the judges that it would be most natural and proper in a body like this to object to such a system of touting and canvassing. He assured the Council that so far as he was concerned he was in earnest in this matter.

The motion, altered to read "associations by which systematic canvassing and advertising," was then put to the Council and carried, no member holding up his hand against it.

Dr. GLOVER gave notice that he would put upon the programme a motion to forward to the bodies concerned copies of both resolutions.

In the body of the committee's report the passage beginning "the general tenour of the complaints made to us is that canvassing on a large and promiscuous scale is practised" was made to read "promiscuous canvassing on a large scale."

The Recovery of Fines.

The Council received the following recommendation from the Penal Cases Committee adopted on April 28th, 1899, in connexion with the penalty recently paid by Mr. T. R.

Allinson and retained by the Receiver of Police in regard to which Mr. Muir Mackenzie had advised that this was a proper case to take into the courts to test the point of law relating to penalties:—

That the committee recommend the Council to bring an action for the recovery of the fine and to instruct Mr. Farrer to that effect.

The Executive Committee on May 29th passed the following resolution on this subject:—

That the Executive Committee approve of the recommendation of the Penal Cases Committee and advise the Council to take the legal proceedings referred to, and that the documents be referred to the Committee on Fines under the Medical Acts.

The Council also received the following report from the Committee on Fines under the Medical Acts, viz.:—

The Committee on Fines, while thinking that the answer of the Home Secretary on the subject of fines under the Medical Acts should have been directly referred to them for consideration, approve of the action taken by the Penal Cases Committee and the Executive Committee respectively in obtaining Mr. Muir Mackenzie's opinion relative to the legality of the claim of the Receiver of the Metropolitan Police to take all such fines.

The committee further approve of the recommendation made by Mr. Muir Mackenzie that an action-at-law should be undertaken by the Council to test the claim above stated.

J. G. GLOVER, Chairman.

The Colonial List.

On the motion of Mr. HORSLEY, seconded by Dr. BRUCE, it was agreed:—

That the application of Miss Rachel Cohen, M.B. Calcutta, to register in the Colonial List the diploma F.R.C.S.I. which she has obtained be acceded to, and that the Registrar be directed in future to register additional or higher qualifications in the Colonial List.

The Case of Alfred Freeman.

The Council sat for a considerable time during this afternoon *in camerâ* and among the decisions arrived at was the following:—

That the recommendation of the Executive Committee respecting the case of Alfred Freeman be adopted and that accordingly the Registrar be instructed to restore the name and qualification of Alfred Freeman to the Medical Register.

The Council adjourned.

WEDNESDAY, JUNE 7TH.

The Council resumed to-day, Sir WILLIAM TURNER being in the chair.

Medical Aid Associations.

In the course of adjusting the minutes of the previous sitting the Council altered the resolution with regard to medical aid associations so as to read at the close:

Associations which systematically practise canvassing and advertising for the purpose of procuring patients.

The "Abounding Eloquence" of Members.

Mr. CARTER said he should like to make a suggestion in favour of the despatch of business. They were all of them exceedingly anxious to conclude the business of the session as quickly as possible and they were all of them conscious that the recent sessions of the Council had been a good deal prolonged. Their last session which might have been finished in five or six days was extended to nine days and they were all of them conscious that that was largely due to the abounding eloquence of certain members of the Council, two of whom in five or six days made between them 133 speeches. It might be conducive to the despatch of business if there was an understanding that no member should speak more than three times on each motion.

The Proceedings against the late Mr. H. K. Hunter.

The first item of business on the programme was a notice by Mr. HORSLEY, "To draw attention to the proceedings taken in the name of the Council against the late Mr. H. K. Hunter, L.S.A." After some preliminary discussion the Council decided to postpone the matter until to-morrow and to ask the legal assessor and the solicitor to be in attendance then.

The Efficiency of Examinations.

Mr. HORSLEY moved:

That this Council records its opinion that by Sections 18 and 20 of the Medical Act, 1858, the duty is imposed on the Council of inquiry into and securing as far as possible the efficiency of any examination which confers any registrable qualification mentioned in Schedule A of the said Act.

He explained that he and Dr. Bruce had put this motion on the paper from the purely academic point of view and he trusted that it would not be necessary for him to repeat the observations he made the other day relative to the interpretation of the Medical Acts. He would only once more ask the Council to think in reading the Act, as he did, that Section 20 did not in any way invalidate the application of Sections 18 and 20. That was all he asked the Council to affirm by this motion.

Dr. BRUCE seconded the motion.

The PRESIDENT asked Mr. Horsley to show the bearings of Section 3 of the Act of 1886 upon this question.

Mr. HORSLEY replied that the bearing of Section 3 of the Act of 1886 upon this question was to his mind *nil*. That section for the first time introduced a new feature into the Medical Acts. It introduced a statutory statement as to the bare minimum upon which a man could gain entry to the Register. But if they were to interpret Section 3 of the Act of 1886 in the manner indicated by some members of the Council the other day then they should have to say that the term "qualification" was restricted absolutely in the sense of the Act of 1886. But if that were so of course the Legislature would have repealed the Act of 1858 altogether or at any rate those sections in which such a restricted term appeared.

The PRESIDENT said there was another question he would like to ask: Had Mr. Horsley considered whether the Registrar of the Council would be in a position to decline to put on the Register as an additional qualification a Fellowship for which there had been no examination? Had he considered how that bore upon the point raised in the motion?

Mr. HORSLEY said it did not bear upon the point at all. It was a question no doubt of great importance, but it was one for discussion, and a very fit one for discussion, by the Council. The only thing that could be said in relation to a matter of that kind was that this Council had recognised certain qualifications for which in most instances an examination was required, but he was not aware that this Council, in expressing its recognition of any Fellowship for instance, had laid down the condition that it must be secured by examination. He thought it ought to have done so, but that was another matter. He was not aware that this Council had in any way made that a condition and until it did make it a condition then he submitted that this did not come into his point.

Dr. MACALISTER said that Section 20 of the Act of 1858 appeared to him directly to contemplate such qualifications as might follow a course of study and examination and no others. The section said: "In case it appear to the General Council that the course of study and examination to be gone through in order to obtain any such qualification from any such college or body are not such as to secure the possession by persons obtaining such qualification of the requisite knowledge and skill for the efficient practice of their profession, it shall be lawful for such General Council to represent the same to Her Majesty's most honourable Privy Council." That seemed to him to limit the qualifications to those obtained after a course of study and examination and the sufficiency of these examinations was naturally a matter which could be inquired into if the qualification was one which admitted to the Register and not otherwise. He did not see how they could get out of that.

Dr. BRUCE said that the view of the matter which he took was that as long as men were allowed to be put on the Register they should not shut the door against inquiry into the nature of their qualification.

After further debate a vote was taken, when seven members voted for the motion, nine members voted against it, 12 did not vote on either side, and two were absent. The motion was accordingly lost.

The Legal Advisers.

In response to a question addressed to the chair by Mr. HORSLEY, the REGISTRAR read a memorandum giving a historical account of the position of the legal assessor and the solicitor to the Council.

Procedure in Dental Penal Cases.

Mr. TOMES brought up a recommendation from the Dental Committee as to adopting a new standing order for regulating procedure in dental penal cases. The Council decided that the new standing order required some adjustment and its adoption was in consequence postponed.

The Committee on Dispensing.

On the motion of Mr. TEALE the name of Mr. Carter was added to the Committee on Dispensing.

The First Year of Medical Study.

The next business was the reception of a report by the

Education Committee on the regulations of the Conjoint Boards in England and Scotland concerning the first year of medical study.

A large part of the report was devoted to a historical review of the situation too long to summarise. Following this there were the following "remarks by the committee," viz. :—

The committee, in presenting the foregoing historical statement, desire to call the attention of the Council to the two questions, distinct but interconnected, which it involves. First, the question whether a year of scientific study before registration should in exceptional cases be recognised as constituting one of the five years of the medical curriculum. Second, the question whether a year of scientific study taken after registration, but in an institution of the status and character of an ordinary secondary or grammar school, should regularly be recognised as constituting one of the five years required.

The first question is that raised by the enactment of Section X of the Scottish Universities Ordinances. The committee and the Council repeatedly protested against this section, both as being a dangerous precedent and as unnecessary for the relief of the *bonâ fide* cases of exception contemplated by the Commissioners. Experience seems to have justified the protest on both grounds. According to the information before the committee, Section X has not been utilised to any great extent. In Aberdeen no cases of exemption have occurred, in Edinburgh five, and in Glasgow four. But the committee understand that in all the cases examinations qualifying for registration had been passed; indeed in two of the Glasgow cases the applicants for exemption were already graduates in arts. The section was therefore for its proposed purpose superfluous, as any formal difficulty it was devised to remove could have been met in other ways to which no objection could be taken. But the example set by this enactment has apparently had the influence which the Council apprehended, and the new regulations of the Conjoint Boards in England and Scotland illustrate the manner of its operation.

The second question, had it been formally raised at the time when the Conjoint Board in England obtained from the Council the concession that scientific study before registration should qualify for the first examination, would in the committee's opinion have been answered in the negative by the Council. One chief object of the Council's action has been to secure that ordinary school work should be completed and tested by a sufficient preliminary examination before the course of medical study was begun. It has been felt that to be truly profitable to the medical student his work at the ancillary sciences should be conducted under higher conditions and under better safeguards as to efficiency than can be looked for in secondary schools, the majority of whose pupils are still boys and girls. The wholesale recognition of ordinary day schools as "teaching institutions" in which the first year of medical study may be pursued, must practically frustrate this object and bring about the result foreseen by the committee in their report of May 24th, 1894. They would in particular call the Council's attention to the following paragraph :—

The committee, however, cannot help regarding the system with considerable distrust: First, because in practice it may tend to the recognition of an inferior class of schools; secondly, because the standard of examination in science may, as a consequence, be so lowered as practically to lead to the waste of the first year of study; thirdly, because it does not explicitly provide for any preliminary examination in the ordinary school subjects before the special scientific subjects are begun; and, fourthly, because, though the Conjoint Boards have safeguarded their system by requiring five years of medical study after registration of such schoolboy students, it is open to any other licensing body to require only four years.

As to the remedy, the committee still feel the difficulty, pointed out in their report of 1894, of the Council taking action in regard to the inspection and direct recognition of "teaching institutions." But it appears now that the check proposed by the committee and adopted by the Council on the recognition of such institutions "after due inspection" by the licensing bodies has proved insufficient in two ways. In the first place, contrary to the Council's intention, a considerable number of secondary and even of board schools have been admitted to recognition; in the second place, the duty of inspection delegated to the licensing bodies has not been carried out in all cases.

The committee have definitely ascertained that the Conjoint Board in England has recognised certain "teaching institutions" for the purposes of instruction, examination, and registration, without the guarantee which inspection affords that the said institutions are adequately equipped and efficiently conducted. The chairman of the committee wrote to the secretary of the Board on Feb. 8th asking whether the following schools had been inspected: Nonconformist Grammar School, Bishop's Stortford; Bristol Grammar School; The Grammar School, Bromyard; Felsted School, Felsted; Higher Grade Board School, Hanley; Mercers' School, Holborn; Higher Grade Board School, Norwich; Higher Grade Board School, Portsmouth; Grammar School, Portsmouth; Forest Schools, Walthamstow; Grammar School, Woodford, Essex. The following is the reply:—

Examination Hall, Victoria Embankment,
London, W.C., March 21st, 1899.

DEAR SIR JOHN BATTY TUKE,—I have now submitted your letter of the 3rd ult. to the committee of management of this board and I am desired to inform you that the following resolution was adopted by them in reference to your request for information as to the recognition of institutions, viz. :—

"That whilst the committee of management are of opinion that the question of the recognition of institutions is entirely one for the respective examining bodies to determine for themselves Sir John Batty Tuke be informed that the following schools mentioned by him have been visited and reported on favourably by members of the committee, viz.: Felsted School; Mercers' School, Holborn; Higher Grade Board School, Portsmouth; Forest School, Walthamstow; Bancroft School, Woodford, Essex; and that the others mentioned by him were accepted after the committee had satisfied themselves that the schools fulfilled the requirements of, and were recognised by, the South Kensington Science and Art Department."

I return your marked list of schools.

Yours very truly,
FREDERIC G. HALLET, Secretary.

Sir John Batty Tuke, M.D.

The committee have thus to report that the recognition of "teaching institutions where physics, chemistry, and elementary biology are taught," without due inspection, is not in accordance with Resolution II. agreed to by the Council on Dec. 4th, 1894.

It therefore appears to the committee necessary that the Council should now take a further step. The licensing bodies should be informed that schools for boys and girls were not intended by the Council to be regarded as institutions at which the first of the five years of medical study may be spent, and the Council should require that before registration is effected a student should have commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies *and approved by the Council*. If this were done the recognised institutions would not merely, as now, be reported to the Registrar, but would come in a regular and formal way before the Council for its approval. Attention could thus be drawn to any institution regarding which objection might be taken and approval withheld if the evidence as to its status and efficiency were unsatisfactory. As registration is a matter over which the Council alone has control this manner of dealing with the difficulty appears to be the least open to objection.

RECOMMENDATIONS.

I. That the regulations in regard to registration from and after Jan. 1st, 1900, be amended as follows:—

REGULATIONS IN REGARD TO REGISTRATION.

No medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council and has produced evidence that he has commenced medical study at a university, school of medicine, or scientific institution recognised by one of the licensing bodies and approved by the Council.

Each of the branch registrars shall keep a register of medical students according to the subjoined form.

Form for the Registration of Medical Students.

Name.	Preliminary examination of arts, with date thereof.	Date of Registration.	Place and date of commencement of study, as certified by an official of a university, school of medicine, or scientific institution approved by the Council.

II. That the Registrar be directed to call the attention of the licensing bodies to the foregoing resolution.

The report was formally received and entered on the minutes.

Sir JOHN BATTY TUKE, seconded by Dr. MACALISTER, moved the adoption of the first recommendation.

The PRESIDENT said that as he understood the situation the change recommended by the committee was the insertion of the words "and approved by the Council."

Mr. CARTER asked whether it was proposed to institute inspection of the bodies, because if it was not then he failed to see how they were going to proceed.

The PRESIDENT pointed out that the Council had no power under the Act to inspect teaching institutions.

Mr. CARTER said he would like to know how they were going to reach the mental condition of approval.

Sir CHRISTOPHER NIXON suggested that the licensing bodies could inspect the institutions and this Council could act upon their report.

Sir RICHARD THORNE said it was no uncommon thing for a Government department to approve a thing without actually inspecting it.

Dr. MACALISTER said that registration was a matter for this Council alone and it was suggested that it should only take place in connexion with institutions which had been brought formally before the Council and had been approved by the Council in the sense that no objection had been raised to them. What happened at present was that the body sent up to the Registrar a list of the institutions which during the year had been recognised after due inspection by the body and that list remained in the hands of the Registrar, and the Council never said anything about it. It was surely desirable that this list should come before the Council and be put in print and circulated and if a member happened to see on the list an institution about which he had views or information then he could raise a question about it in the Council and the matter could be discussed. All they wanted was to give the members of the Council an opportunity to object to any institution which, in their opinion, ought not to be recognised.

Mr. BRYANT said that this report contained a principle which he was afraid his College (the Royal College of Surgeons of England) could not accept. Hitherto this Council had allowed all the examining bodies to select the institutions they recognised, and in the case of his own

College there were a few institutions which had not been inspected though they were recognised. If the Council objected to the want of inspection he had little doubt it could be arranged. But he did not see why it was necessary that the institutions recognised should be approved by this Council. In such a matter the Council must rely on the examining body which was responsible for the selection.

Sir DYCE DUCKWORTH said his position as the representative of the Royal College of Physicians of London was the same as that of Mr. Bryant. This was a new departure with a vengeance and one which would destroy the autonomy of the Royal Colleges who held their privileges by charter and who meant to stand by these privileges whatever the Council might say or do. He could not help thinking that this recommendation was presented under a false conception of the duties of the Council.

Mr. CARTER said that he was afraid this recommendation would weaken the sense of responsibility in the examining bodies themselves.

Dr. CHURCH proposed that the old form should be retained.

Sir PHILIP SMYLY said that he had been instructed to see that the five years' course of study was not cut down to four years.

Sir RICHARD THORNE remarked that according to the speeches made during the afternoon the proposed action of the Council was absolutely illegal. He sympathised very much with the report. He was perfectly satisfied that an attempt was being made to whittle away the five years' system, but if the Council could not resist this he did not see why they should beat the air with a resolution of the sort now before the Council.

Sir WILLIAM THOMSON strongly supported the recommendation of the Education Committee. He maintained that the Conjoint Board for England was pursuing a course of action which was offering a four years' course instead of the five years' curriculum recommended by the Council. He maintained further that this action was in absolute opposition to the Council's requirements and recommendations, and yet from their statements the representatives of the Royal Colleges of England apparently intended to stand by the position which they had assumed. He (Sir William Thomson) wanted to know what the Council now proposed to do. He had been of opinion that the Council had direction of these things, and it was for them to see that they were carried out. But according to what they had heard to-day all those considerations were to be put aside by the two Royal Colleges of England, who seemed to say that independently of anything that the Council proposed they would do what they liked. If the Medical Council was impotent in regard to its own rules there was no use in coming here at all. He was perfectly sure that the Council had no intention of making study in science at a grammar school equivalent to a first year's medical course. There was no question that what the Council intended was that the first year's medical study should be study at a university, medical school, or "scientific institution approved by the Council." That was exactly what they wanted to-day. He could not understand how they were met at the threshold by two powerful corporations saying that they would not obey the General Medical Council. If they had to face such disobedience on the part of medical licensing bodies, the sooner the Council ceased to issue recommendations the better it would be for their dignity. In conclusion, he asked the Council to accept the committee's report.

Sir CHRISTOPHER NIXON said that as a member of the Education Committee and the representative of the Royal University of Ireland, he wished to state that the authorities of that University had most rigidly carried out the recommendations of the General Medical Council in respect to the five years' curriculum. So far as the University course of study for the first year was concerned it was strictly in accordance with this Council's recommendation, and he was perfectly certain that nobody in Ireland would think that they could get the first year's medical study at a place other than a recognised medical school. If one or two representatives of the licensing authorities declared that they would not be bound by the regulations of the General Medical Council he thought the time would come when other corporations would also say that they would disobey and that, in his view, would be very detrimental to the medical profession. The General Medical Council wanted to have, as they ought to have, control over the various licensing bodies recognised and it was for the Council to say whether the Council should or should not recognise certain institutions. He took the present case as a test one. If the Council felt that it was not in its power to deal with such a case it would perhaps throw out the recommendation of the Education Committee, but if it did that he was afraid that they would be going on the downward path and all that they had done in the way of advancing education would be lost.

Mr. BROWN hoped that the Council would adopt this report without any fear of the dire consequences which some members had threatened. He maintained that if the first year of study was to be study in science in a grammar school that would be a disastrous thing for medical education. If they recognised grammar-school education they would have boys of 14 or 15 years of age entering upon the second year of professional study. He should strongly support the committee in their recommendations.

Dr. MACALISTER maintained that the Colleges, the Conjoint Board, had kept strictly within the letter of the law.

Sir J. BATTY TUKE: Yes, within the strict letter of the law.

Dr. MCVAIL supported the committee in the report that they had made. He thought, however, that that report was too mild and that it ought to have been couched in very much stronger language. In his opinion it would be ridiculous if the two Colleges in question and the General Medical Council were to go before the Privy Council on such a trifling matter.

Dr. LOMBE ATTHILL expressed the opinion that a systematic effort was being made to whittle down the five years' course. He objected to that, notwithstanding that he believed that medical students now did not get such good education as they got under the four years' curriculum.

The PRESIDENT said that the point at issue really was this—it was not that the two London Colleges declined to submit to the Council's recommendations, but, as he understood their contention, they declined to limit their functions to the question of approval.

Sir WILLIAM GAIRDNER said that he felt considerably relieved by Dr. MacAlister's remark that the Conjoint Board were keeping within the letter of the law, although they might have expanded their ideas. He reminded the Council that they were confronted by an educational movement which amounted practically to a revolution—that was to say, science had been introduced into the school curriculum to a much greater extent than it was thought some years ago that it would be possible to introduce it. The Council must take care that in anything they did they did not hamper this educational movement which was distinctly of the greatest importance not only to the medical profession, but also to other departments in the social system. He did not think that the Council should interfere with that movement at all. On the contrary, he was of opinion that the movement in question should be taken full advantage of. Yet he was of the view that nothing of science which was taught in school should count as part of the medical curriculum.

Dr. BRUCE said that he entirely sympathised with the view of Sir William Gairdner as to the great advantage of science being taught in the grammar school, but as they had put it in their regulations that a certain amount of science was a part of that medical study it seem to him quite plain that the matter came within the purview of the General Medical Council. Therefore it was the Council's duty to see that the subjects were properly taught.

Mr. TEALE said that it struck him that there were just two points that had not been particularly referred to during this discussion. When the Council decided upon adding a fifth year to the curriculum it was understood that the fifth year was to be a clinical year. Then members of Council thought that as there was to be a period of five years for study they might as well decide upon introducing elementary subjects which had not been required before. That introduced a difficulty, an entanglement, and he was quite certain that the efforts of the Royal Colleges of England had been put forward to get over that entanglement. He believed that the Royal Colleges wished to make a genuine attempt by what they proposed to get rid of this first year's entanglement of study, they being of the belief that the first year's study had been spoilt by the addition of these preliminary subjects.

After some further conversation, in the course of which the PRESIDENT said that there was nothing before the Council but the motion of Sir John Batty Tuke.

Dr. CHURCH said that he was prepared to move as an amendment the following:

That in the regulations in regard to registration the word "scientific" before "institution" be omitted, and that the concluding words "approved by the Council" be also omitted.

Mr. TEALE seconded this proposal.

Sir JOHN BATTY TUKE, in reply on the whole debate, expressed regret that the only amendment to the committee's proposal had come from a member of the committee. He was sorry to inform some of the lately appointed members of the committee that as the Medical Acts were generally read the General Medical Council had comparatively little power over medical education, but he had always held, and still held, that they had great power in this—the loyalty of the various licensing bodies to the General Medical Council. That was a moral force. If it had not been for it medical education would not have arrived at its present advanced state. And he must say that the speeches of the two representatives of the two English Colleges ought not to have been heard that day. He was charitable enough to believe that there was a considerable amount of misunderstanding as regards the loyalty of these two bodies to the General Medical Council, and he hoped that their future action would show that that was correct.

The Council divided on the amendment proposed by Dr. Church, with the result that nine voted for the amendment and 16 against it. On the names being called and the numbers taken it was found that 17 were against the amendment and nine for it.

The amendment accordingly was rejected.

Mr. BRYANT rose, he said, to propose a further amendment. He did think that his College—the Royal College of Surgeons of England—or rather the Conjoint Board of England, had on this occasion been badly treated by the Council. Whether it was an intentional misunderstanding of the fact of the case he did not know, but he thought they had not been well treated. It was not their fault if there was anything wrong in regard to teaching institutions recognised by the Council, for he had repeatedly stated that the principle of the management of the two Colleges had been to visit and inspect every institution which had been recognised by them. No doubt at the beginning some had been excluded at the instance of the South Kensington authorities, but what he distinctly told the Council now was that they would be perfectly willing to undertake the visiting and inspection of even these excluded institutions. He proposed:—

That the following be adopted instead of the recommendation of the committee—namely, that the list of recognised teaching institutions forwarded to the Registrar at the beginning of each year be returned to the next following meeting of the Executive Committee and printed in the minutes of that committee for the information of the Council.

Sir J. BATTY TUKE said that this amendment was no more than a repetition of what the Council had already voted upon and rejected.

On a division eight voted for the amendment and 18 against. On the original motion being put to the vote it was carried by 18 votes to six, five members declining to vote and one being absent.

On the motion of Sir J. BATTY TUKE, seconded by Dr. MACALISTER, it was unanimously agreed that the Registrar should be directed to call the attention of the licensing bodies to the resolution just arrived at.

Penal Cases Committee.

On the motion of Dr. BRUCE, seconded by Dr. ATTHILL, it was agreed—

That the number of the members of the Penal Cases Committee be the same as that of the Executive Committee—viz., eight, exclusive of the President, four from England, two from Scotland, and two from Ireland.

The Council adjourned.

PROVIDENT MEDICAL ASSOCIATION.—By the invitation of Lady Hope and Mr. T. A. Denny a drawing-room meeting was held at 7, Connaught-place on Tuesday, June 6th, in support of the work of the Metropolitan Provident Medical Association, the object of which is to provide efficient medical treatment for those of the working classes who are unable to pay the usual fees on a system of mutual assurance by small periodical payments. There are 20 branches, 15 of which are dispensaries and five medical clubs, from which 11,441 membership cards, family and single, were issued last year, the payments amounting to £5304. A resolution to the effect that it was necessary to work in coöperation with the hospitals under rules approved by the medical profession, and that branches should be formed in every district in London on the system of this association was carried.

Medical News.

FOREIGN UNIVERSITY INTELLIGENCE.—*Amsterdam:* Dr. H. Timmer has been recognised as *privat-docent* of Orthopædics.—*Bahia:* Dr. Joaquim Matheus dos Santos has been appointed Professor of Hygiene.—*Gratz:* Dr. E. Payr has been recognised as *privat-docent* of Surgery.—*Kieff:* Dr. J. Landenbach has been appointed to the chair of Pharmacology.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.—At the monthly meeting of the College held on June 2nd Mr. George Thorpe, L.S.A., having passed a special examination for the Licence in Medicine of the College, was admitted by the President and Fellows to the Licence.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a meeting of the Fellows held on June 5th the following officers were elected for the ensuing year:—President: Mr. Robert Lafayette Swan. Vice-President: Dr. Thomas Myles. Honorary Secretary: Sir Charles A. Cameron, C.B. Council: Professor Archibald H. Jacob, Professor Edward Hallaran Bennett, Sir Philip Crampton Smyly, Sir William Stokes, Mr. Henry Rosborough Swanzy, Professor William Stoker, Dr. William Ireland Wheeler, Sir William Thomson, Mr. Austin Meldon, D.L., Sir Charles A. Cameron, C.B., Dr. L. Heperstal Ormsby, Dr. Richard D. Purefoy, Dr. John J. Cranny, Mr. Henry Gregg Sherlock, Professor John B. Story, Dr. Henry Fitzgibbon, Dr. Francis T. Heuston, Mr. John Lentaigne, and Dr. Richard Bolton M'Causland.

THE DEVON QUEEN VICTORIA COMMEMORATION FUND.—The Finance Committee of this fund reported on May 29th that the fund now consists of £5800, giving a net income of £173 together with reversions which will come in at the expiration of existing leases. A scheme is to be submitted for the distribution of this amount among hospitals and convalescent homes. The committee appeal for further subscriptions and hope that a renewed effort will be made to endow the County Hospital Fund with an income sufficient to give material assistance to the various medical institutions of Devonshire.

THE "STREETS AND SQUARES BAZAAR" IN AID OF ST. MARY'S HOSPITAL.—On June 6th and 7th a bazaar in aid of St. Mary's Hospital and the Clarence Memorial wing was held at the Hotel Great Central in the Marylebone-road, London. On the first day the bazaar was opened by H.R.H. Princess Louise, Duchess of Fife, who was accompanied by her husband, the Duke of Fife. The stalls, which were 28 in number, were named after some of the principal streets, squares, and thoroughfares in the west and north-west of London and many of the charitable ladies who presided over them were well-known leaders of fashionable society. Members of the theatrical and musical professions lent their aid in making the bazaar a success and the bands of the Royal Horse Guards and the Royal Engineers played during each day. It is to be hoped that the hospital will be benefited by a large amount. The management of the hotel very generously handed over the whole of the receipts for luncheon and dinner received on June 6th to the funds of the hospital.

THE DROITWICH BRINE BATHS.—A new station on the Great Western Railway which marks a decided advance in the progress of the old town of Droitwich was opened on June 3rd. Of recent years much has been done to attract visitors to English health resorts and bathing places and at Droitwich, which has come in for its share of increased popularity, the old station has been found to be too small to accommodate the increasing number of visitors, hence the building of the new one. The opening ceremony was performed by Sir A. F. Godson, M.P., in the unavoidable absence of Mr. Corbett, who gave the ground on which the new station was built. Mr. D. M'Iver, a director of the Great Western Railway Company, remarked on the present occasion that Droitwich Station was opened in 1852 and that 12 years later there were only seven trains daily between it and London, the fastest train taking five and a half hours to make the journey. Now there were

60 trains a day and the fastest train took three and a half hours. Sir A. F. Godson, M.P., opened the station door with a silver key and after the station had been inspected luncheon was served at the Salters' Hall. The loyal toasts and the toast of "Prosperity to Droitwich" having been proposed and honoured the party proceeded to inspect the brine baths of Droitwich, the credit of the discovery of which is given to the Romans. They gave it the name of Salinæ. The baths are fitted with all modern conveniences, and not only have the well-to-do been catered for, but the poor can avail themselves of the curative properties of the hot brine at the St. John's Brine Baths Hospital, which is situated at the other end of the town.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The annual general meeting of this society was held on May 31st at 11, Chandos-street, W., Mr. Christopher Heath, vice-president, being in the chair. From the report read by the secretary it appeared that a sum of £3023 had been given during 1898 to the 50 widows and 12 orphans in receipt of grants and the six recipients from the Copeland Fund. A present of £551 had been made at Christmas—viz., £10 to each widow, £3 to each orphan, and £5 to those on the Copeland Fund. One widow had died and one was taken on the funds, and three orphans had become ineligible and one had been elected. The number of members remained the same, 287, nine having died and nine having been elected. The expenses of the year had been £244 10*s.*; the total disbursements had been £3267 10*s.*, and the receipts available for payments £3326 2*s.* 8*d.*, leaving a balance of £58 12*s.* 8*d.* A grant under By-law 78 of £26 was made to a widow. A vote of thanks to the editors of the medical journals, proposed by Mr. J. R. Lynch and seconded by Sir Samuel Wilks, was carried unanimously. Sir Thomas Smith was elected a vice-president in the place of Mr. Henry Lee, deceased, and Mr. Morey, Mr. C. King, Mr. Leigh, Mr. Gimson, Dr. West, and Dr. Whipham were elected in the place of the six senior directors who retired. The funded property had been increased by the purchase of £500 Birmingham 2½ per cent. Corporation Stock. The funded property of the society on May 1st, 1899, was £97,687 15*s.* 11*d.* The proceedings terminated with a vote of thanks to the chairman, proposed by Mr. Lovett and seconded by Dr. Pollock.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Notification of Infectious Disease.

THE Bill to extend the Infectious Disease (Notification) Act of 1889 to those places which have not already adopted it has passed through all its stages in both Houses of Parliament.

The Vaccination Question.

In the House of Lords on June 2nd the Lord Chancellor presented a petition from the Poor-law guardians of the Wandsworth and Clapham District in favour of the abolition of all forms of compulsory vaccination. His lordship said that while he presented the petition in accordance with the practice of the House he entirely differed from the reasons given in it.

HOUSE OF COMMONS.

THURSDAY, JUNE 1ST.

The London Water Question.

Mr. JAMES STUART, on behalf of the London County Council, moved that the order for the second reading of the London Water (Purchase) Bill be read and discharged and the Bill withdrawn, saying that as the Royal Commission had not yet reported it was quite impossible to come to a satisfactory decision with regard to the measure.—Mr. WHITMORE, who had given notice of motion for the rejection of the Bill, said that he quite agreed with this statement and he only regretted that the County Council had not felt the force of it much earlier in the year.—Mr. BARTLEY, Mr. DUNCOMBE, and other Members protested against the waste of money that had taken place.—Mr. STUART explained that the Bill had been introduced in the hope that the Commission would have reported in time for its consideration during the present session.—The motion was then agreed to.

FRIDAY, JUNE 2ND.

Milk from the Aldershot Sewage Farm.

Mr. JEFFREYS asked the Under Secretary of State for War whether he had received the report of the medical officer appointed by the War Office to inspect the Camp Sewage Farm at Aldershot and whether it was still proposed to supply the troops with milk from that farm.—Mr. GEORGE WYNDHAM: The report has been received and will be laid on the table of the House to-day. There has been no question of supplying the troops with this milk as part of their rations. The question has been whether they should be prohibited from purchasing it. Dr. Andrewes's report contains nothing which would warrant such a prohibition. It does, however, suggest one improvement in the arrangement of the farm, the cost of which is now being investigated.

The Vaccination Question.

In Committee of Supply on the vote for the salaries and expenses of the department of the Local Government Board there was a long debate on various aspects of the vaccination question.

Mr. PICKERSGILL introduced the subject of vaccination prosecutions. He insisted that the President of the Local Government Board by his recent action had encouraged vaccination officers to flout their employers and paymasters, the boards of guardians. The Order of October last altered the law and, he said, gave the "go-by" to the boards of guardians in regard to sanctioning prosecutions. He had himself raised this question last year in the discussion on the Vaccination Bill and had proposed a clause providing that parents should not without the sanction of the guardians be prosecuted for neglecting to vaccinate their children. He withdrew the clause, however, in consequence of a pledge given by the President of the Local Government Board, who then said that he quite recognised that the administration of a compulsory vaccination law was neither necessary nor desirable. There could be no doubt that the right hon. gentleman had misled the House of Commons, however unintentionally. As the vaccination officers were paid by fees they had a direct pecuniary interest in promoting prosecutions. Another thing he complained of was the action of the President of the Local Government Board in informing boards of guardians that they were entitled to circulate at the public expense pro-vaccination pamphlets issued by the Jenner Society.

Mr. CHAPLIN, in reply, said that the sanction of the Local Government Board to the circulation of literature for the encouragement of vaccination had been the practice for 20 years or more under Section 28 of the Vaccination Act, 1867, and he saw no reason to interfere with it. As to vaccination prosecutions he denied that he had in any way misled the House. The amendment proposed by the hon. Member found very little support and was withdrawn without any assurance from him. As matter of fact he could not have given the assurance the hon. Member supposed he had given, for any interference on his part with regard to proceeding by vaccination officers would after the decision of the courts have been superfluous and ineffectual. He contended that it was impossible for any Minister in charge of a Bill to be more open and frank than he had been during the whole of the debates on the Bill and that if there had been a misunderstanding upon a particular point he regretted it, but it was not his fault. It might be very distasteful to some hon. gentlemen on the Opposition side to find that, under the Act of last year vaccination was more frequent and was going on more steadily than it had gone on for years past. That was the reverse of intolerable to him. He desired to do everything in his power to promote vaccination. The hon. gentlemen opposite desired to do everything in their power to prevent it. That really was the explanation of the complaints which were now being made against him.

Mr. CHANNING said that a return recently issued of the number of conscientious objection certificates taken out during the few months in which the Act was in operation up to the end of last year showed that they covered about 230,000 children. The right hon. gentleman seemed convinced that the Act would lead to a great increase in vaccination, but he was labouring under a grave misapprehension. The figures he had quoted represented nothing like the actual number of children and young persons who were unvaccinated throughout the country. In the town of Leicester, he was assured, there were some 80,000 unvaccinated, while only a small proportion of exemption certificates had been obtained. In his own division only some 7000 or 8000 certificates had been taken out, but he had been informed that, so far from those figures representing the number of unvaccinated children whose parents objected to vaccination, they would have to be multiplied four, five, or even more times before the actual number of unvaccinated persons could be ascertained. He protested against the Order of October as a change in the law carried out in a way that was contrary to the constitution, and he asked the right hon. gentleman whether he really meant that vaccination officers should proceed wholesale with prosecutions.

Sir WALTER FOSTER said that he regarded the issue of the Order as unfortunate. A number of vaccination officers were appointed by the boards of guardians and for the future they would take up some of the most difficult duties and perform them in spite of the objections of those from whom they received their salaries; the result of that must be that these officers would find their position intolerable. Not only so, but the boards of guardians would cease to appoint vaccination officers and vaccination would fall into greater neglect than ever. He congratulated the right hon. gentleman on the statement which he had made as to the success of the Act. He thought that statement must be reassuring to the country and to the House—that the policy carried out last year was a right policy. He had received information from various parts of the country from medical men and he found that there was a larger amount of vaccination during the last two months than in any preceding two months for many years. He thought, however, that the result would have been infinitely greater if it had not been for the stupid policy of the press and the magistracy. He thought that the magistracy were to blame because they had not carried out the law as it was intended to be carried out. Unfortunately the press took the matter up and there was a great deal of wild writing tending to make it difficult for the magistrates to grant certificates. If the certificates had been granted readily there would have been less agitation.

Mr. CHAPLIN in another speech said that the circular of October was merely the usual intimation as to the duties of authorities under an Act of Parliament. Whatever the circular might say, the Act of Parliament and the decision of the court remained. He had done nothing to interfere in the relations between guardians and vaccination officers. Any complaints of the conduct of magistrates in relation to vaccination certificates should be addressed to the Home Office, and any complaint of vaccination under insanitary conditions would have careful examination by the Local Government Board. As to the vaccinaton of workhouse children under the age of two months, he was under the impression that no objection was made by the parents, and probably

it was thought wise to have the vaccination early in view of the serious consequences of an outbreak of disease in a workhouse. He regretted the references with satisfaction to the number of unvaccinated children in the country and hoped that such speeches would not have the effect of increasing the difficulties in the way of vaccination. He should perform the duty Parliament had cast upon him to the best of his ability without fear or favour, of course avoiding so far as he could anything that would cause irritation. In the 10 unions of West Bromwich, Maidstone, Lambeth, Fulham, St. Olave's, Holborn, Whitechapel, St. Saviour's (Paddington), Stoke-on-Trent, and Glamorgan, the number of vaccinations in the first quarter of 1898 was 3744, and in the first quarter of 1899 the number was 6814, or a net increase of 77 per cent. He had every reason to believe that those figures might be taken as a fair indication of what was going on in other parts of the country.

Sir WILLIAM HARCOURT said that he regarded the statement of the right hon. gentleman as most satisfactory, and the figures he had given must have convinced him how much better the amended Bill was than the Bill originally introduced.

After some further discussion the House passed to another subject.

Metropolitan Poor-law Children.

In Committee of Supply, on the vote for the Local Government Board, Mr. CHAPLIN made a statement on this subject. He said that there were five classes of children to be taken charge of in future by the Metropolitan Asylums Board—ophthalmic children, 800; children suffering from ringworm, 400; convalescent children, 360; children defective in intellect, 60; and remand children, 273. With regard to the ophthalmic children two sites had been acquired—one at Brentwood, in Essex, and one at Swanley, in Kent—on which schools were to be built for their accommodation. It was proposed to establish the children suffering from ringworm in the girls' school at Banstead, which would accommodate them extremely well. In regard to convalescents, there had been provided a home at Herne Bay for 134, a home at Margate for 91, and arrangements were being made for the accommodation of 100 at another place. Two houses, one of which was at Peckham, were provided for children mentally defective, and for remands there was a house for 50 at Camberwell and a house for 50 at Hampstead.

MONDAY, JUNE 5TH.

Work in Jam Factories.

Mr. HEDDERWICK asked the Home Secretary whether he was aware that for many months in the year children of 13 years of age and upwards are kept at work in jam factories from six o'clock in the morning till 10 and 11 o'clock at night and are required to carry weights which sometimes amount to about a hundredweight; also that the damp heat in such factories rises frequently to 90° and is productive of colds, bronchitis, pneumonia, and consumption; and whether he proposed to take any steps in the matter.—Sir M. WHITE RIDLEY: In answer to the hon. Member I may remind him that last year I introduced a Bill which would have brought jam factories fully within the sanitary provisions of the Factory Acts and would have enabled me to limit the excessive hours of labour. I think some such legislation is desirable and I have already said so several times this session.

The Dum-Dum Bullet.

Mr. DILLON asked the Secretary of State for India who was responsible for the use of the Dum-Dum bullet by British troops in India.—Lord G. HAMILTON: I stated, in reply to a question put to me by the hon. member in this House on March 24th, 1898, that these bullets were issued by order of the Government of India, that no further sanction for their issue was necessary, and that no such sanction was either asked for or given; but that her Majesty's Government were fully informed as to the proceedings of the Government of India, and saw no reason for questioning their propriety. I may add that the reason for the issue of this bullet was that experience had shown that the bullet previously in use did not adequately protect the troops using it. As at present advised I see no reason for modifying the opinion which I then expressed. But I may add that since last autumn the Government of India have had a new pattern of bullet under trial and I was informed in reply to an inquiry about two months ago that those trials were not complete, but that they would be proceeded with and reported on as soon as possible.—Mr. DILLON: Will the right hon. gentleman kindly say whether he will be willing before the new pattern bullet is adopted to lay before the House the opinion of medical experts on the effects of that bullet on animals?—Lord G. HAMILTON: There were experiments made in connexion with the old bullet and on the strength of these experiments this bullet was adopted.

WEDNESDAY, JUNE 7TH.

The Age Limit for Half-timers.

The Bill to raise the age-limit for half-timers from 11 to 12 years was considered in committee at this sitting and passed with certain amendments. The opponents of the measure intend to propose other amendments during the report stage.

Midwives Bill.

The order for the second reading of this Bill was brought up and further postponed.

BOOKS, ETC., RECEIVED.

ALCAN, FÉLIX, Paris.
Les Ptoses Viscérales. Par F. Glenard. Figures et tableaux. 1899.
Les Projectiles des Armes de Guerre. Par H. Nimier et Ed. Laval. 1899.

APPLETON, D., AND CO., New York.
Transactions of the Twentieth Annual Meeting of the American Laryngological Association, held May, 1898. 1899.

ATTINGER FRÈRES, Neuchâtel.
La Guerre Gréco-Turque. Par le Dr. E. Lardy.

BAILLIÈRE, TINDALL AND COX, King William-street, Strand, London.
Aids to the Analysis of Food and Drugs. By T. H. Pearmain and C. G. Moor, M.A., F.C.S., F.I.C. Second edition. 1899. Price 3*s.* 6*d.*

BAILLIÈRE, TINDALL AND COX, London, and N. K. RAO AND CO., Madras.
Essentials of Modern Treatment of Disease. By K. M. Nadkarni. Parts I. and II. 1898-99.

BLACKIE AND SON, London.
The Principles and Practice of Modern House Construction. Edited by G. Lister Sutcliffe. Illustrated. Divisional. Vol. V. 1899.

BLAKISTON'S SON AND CO., Walnut-street, Philadelphia.
The Newer Remedies. By V. Coblentz, A.M., Phar.M., Ph.D., F.C.S. Third Edition. 1899.

BRILL, E. J., Leide.
Université de Leide. Recueil de Travaux du Laboratoire Boerhaave. Par D. E. Siegenbeck van Heukelom. Tomes I. et II. 1899.

CHAPMAN AND HALL, London.
Animals in Motion. An electro-photographic investigation of consecutive phases of animal progressive movements. By Eadweard Muybridge. 1899. Price 20*s.* net.

CHURCHILL, J. & A., Great Marlborough-street, London.
An Introduction to the Study of Materia Medica. By H. G. Greenish, F.I.C., F.L.S. Illustrated. 1899. Price 15*s.*
Selected Papers on Stone, Prostate, and other Urinary Disorders. By R. Harrison, F.R.C.S. 1899. Price 5*s.*

CLAY, C. J., AND SONS, Ave Maria-lane, London, E.C.
Cambridge Geographical Series—Man, Past and Present. By A. H. Keane, F.R.G.S. 1899. Price 12*s.*

CLINIC PUBLISHING COMPANY, Chicago.
The Abdominal Brain and Automatic Visceral Ganglia. By B. Robinson, B.S., M.D. 1899.

DAMRELL AND UPHAM, Boston.
Clinical Lectures, delivered before the students of the Imperial Moscow University. By G. A. Zacharin, M.D. Translated from the fifth Russian edition by A. Rovinsky, M.D. 1899.

DAWBARN AND WARD, Farringdon-avenue, London.
Early Work in Photography. By W. E. Henry, C.E. With a chapter on Lenses, by S. Ward. Illustrated. Second edition. Price 1*s.*

F. A. DAVIS COMPANY, Philadelphia.
An Epitome of the History of Medicine. By R. Park, A.M., M.D. Based upon a course of Lectures delivered in the University of Buffalo. Second edition. Illustrated. 1899.
Diseases of the Ear, Nose, and Throat, and their accessory cavities. By S. S. Bishop, M.D., D.C.L., LL.D. Second edition. Illustrated. 1898.
The Anatomy of the Central Nervous System of Man and of the Vertebrates in General. By Professor L. Edinger, M.D. Translated from the fifth German edition. By W. S. Hall, Ph.D., M.D., P. L. Holland, M.D., and Edward P. Carlton, B.S. Illustrated. 1899.
A Text-book of Practical Obstetrics. By E. H. Grandin, M.D., and George W. Jarman, M.D. Second Edition. Illustrated. 1898.

GLAISHER, H. J., Wigmore-street, Cavendish-square, London.
Lord Lister and Surgery. By R. Turner, M.A., M.D., F.R.C.S. Edin. 1899. Price 1*s.* net.

GRIFFIN, C., AND CO., Exeter-street, Strand, London.
Clinical Diagnosis: the Bacteriological, Chemical, and Microscopical Evidence of Disease. By Dr. R. Von Jaksch. Revised by the author from the third English edition of the Translation by J. Cagney, M.A., M.D. Fourth Edition. Illustrated. 1899. Price 24*s.*

HOLDER, ALFRED, Wien.
Specielle Pathologie und Therapie. Von Dr. H. Nothnagel. VII. Band: Vegetationsstörungen und Systemerkrankungen der Knochen. Von Dr. M. Sternberg. Mit 10 Abbildungen. 1899.

KEGAN PAUL, TRENCH, AND CO., Charing-cross-road, London.
The Psychology of Reasoning, based on Experimental Researches in Hypnotism. By A. Binet. Translated from the second French edition by A. G. Whyte, B.Sc. 1899. Price 3*s.* 6*d.*
B. Bradshaw's Dictionary of Bathing-places and Climatic Health Resorts. With a Map. 1899. Price 2*s.* 6*d.*

LEHMANN, J. F., München.
Lehmann's Medicinische Handatlanten. Band II.: Anatomischer Atlas der Geburtshilflichen Diagnostik und Therapie. Von Dr. O. Schaeffer. 1899.

LIVINGSTONE, E. AND S., Edinburgh.
Anatomy of the Brain and Spinal Cord. By J. R. Whitaker, B.A., M.B. Lond. Sixth thousand. 1899. Price 5*s.* net.

LONGMANS, GREEN AND CO., Paternoster-row, London.
The Serum Diagnosis of Disease. By R. C. Cabot, M.D. 1899. Price 7*s.* 6*d.*
A Short History of the Progress of Scientific Chemistry in our own Times. By William A. Tilden, D.Sc. Lond., F.R.S. 1899. Price 5*s.* net.

MACLEHOSE, J., AND SONS, Glasgow.
Chemical and Microscopical Aids to Clinical Diagnosis. By C. C. Douglas, M.D., B.Sc. Illustrated. 1899.

MASSON ET CIE, Paris.
Hygiène de l'Allaitement. Par H. de Rothschild. 1899.

OLIVER AND BOYD, Edinburgh.

Anæmia and Some of the Diseases of the Blood-forming Organs and Ductless Glands. By B. Bramwell, M.D., F.R.C.P. Edin., F.R.S.E. 1899. Price 12*s.* 6*d.*

PENTLAND, YOUNG J., Edinburgh and London.

The Murmurs of Mitral Disease. By E. M. Brockbank, M.D., M.R.C.P. Illustrated. 1899.

Manual of Bacteriology. By Robert Muir, M.A., M.D., F.R.C.P. Edin., and James Ritchie, M.A., M.D., B.Sc. Second edition. Illustrated. 1899.

REBMAN PUBLISHING COMPANY, London.

A Text-book of Pathology. By A. Stengel, M.D. Illustrated. 1899. Price 22*s.* 6*d.*

The Care of the Baby: A Manual for Mothers and Nurses. By J. P. C. Griffith, M.D. Second edition. 1899. Price 9*s.*

SAMPSON LOW, MARSTON AND CO., Fetter-lane, Fleet-street, London.

Handbook of Medical Gymnastics. By Anders Wide, M.D. Illustrated. 1899.

SCHWABE, B., Basel.

Untersuchungen von Taubstummen. Von Dr. A. Schwendt und Dr. F. Wagner. 1899.

SHERRATT AND HUGHES, St. Ann-street, Manchester.

Syphilitic Diseases of the Spinal Cord. By R. T. Williamson, M.D. Lond., M.R.C.P. Illustrated. 1899.

SIMPKIN, MARSHALL, HAMILTON AND CO., Stationers' Hall Court, London.

The Use of Lead Compounds in Pottery from the Potters' Point of View. By William Burton, F.C.S. 1899. Price 1*s.*

SWAN SONNENSCHEIN AND CO., London.

The Elements of Vital Statistics. By A. Newsholme, M.D. Lond., F.R.C.P. 1899. Price 7*s.* 6*d.* net.

THE NEW SYDENHAM SOCIETY, London.

The New Sydenham Society's Lexicon of Medicine and the Allied Sciences (Based on Mayne's Lexicon). 25th part. Tap-Zyth (concluding the work). 1899.

THIN, JAMES, Edinburgh.

Elements of Practical Materia Medica and Pharmacy. By William Wood, M.B., C.M. Edin. 1899.

The Pharmacopœia of Guy's Hospital. Compiled by a Committee of the Staff. (H. H. G. Grattan, 17, The Borough, London-bridge, S.E.), 1899.—Magazines, &c., for June: Strand Magazine, Boy's Own Paper and Summer Number, Girl's Own Paper and Summer Number, Leisure Hour, Sunday at Home, Ludgate Magazine, Westminster Review, Contemporary Review, Friendly Greetings, Myra's Journal, Pall Mall Magazine, Windsor Magazine, Cornhill Magazine, Blackwood's Magazine, English Illustrated Magazine, Knowledge, Humanitarian, St. Peter's Magazine, The Englishwoman, Wide World Magazine, New Century Review, The Captain, Science Gossip.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ACLAND, H. T. D., L.R.C.P., M.R.C.S., has been re-appointed an Assistant House Surgeon to St. Thomas's Hospital.

ALLKIN, F. W., M.B., C.M. Edin., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Second Sanitary District of the Ashton-under-Lyne Union.

ARNES, J. A., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

BEALE, H. R., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

BELFRAGE, S. H., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

BEVAN, A., L.R.C.P., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

BINGHAM, S. O., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

BIRD, A. C., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Ear at St. Thomas's Hospital.

BLACK, L. P., M.B., B.C. Camb., L.R.C.P. Lond., M.R.C.S., has been appointed, *pro tem.*, Medical Officer by the Braintree Rural District Council.

BOURDAS, E. C., L.R.C.P., M.R.C.S., has been re-appointed a Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

BRADSHAW, J. C., L.R.C.P., L.R.C.S. Edin., D.P.H., has been appointed Medical Officer for the Walton Sanitary District of the West Derby Union.

BROWNE, B. S., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the Workhouse and the Alcester Sanitary District of the Alcester Union.

BURNS, WILLIAM T., M.R.C.S., L.R.C.P. Lond., has been appointed Public Vaccinator to the City of Carlisle and District by the Carlisle Board of Guardians, vice Murphy, resigned.

COLES, C., M.D. Lond., L.R.C.P., M.R.C.S., has been appointed Medical Officer of Health for the Combined Districts of Leicester and Leicestershire, vice T. Thomas, resigned.

CORNER, E. M., M.A., M.B., B.C. Camb., B.Sc. Lond., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

CULLINAN, N., M.D. Brux., L.R.C.S., L.R.C.P. Edin., L.F.P.S. Glasg., has been appointed Medical Officer of Health for Risca, vice R. Istance, resigned.

DAVIES, G. E., L.R.C.S., has been re-appointed Honorary Ophthalmic Surgeon to the Blackburn and East Lancashire Infirmary.

DOWSETT, E. B., L.R.C.P., M.R.C.S., L.D.S., has been appointed Staff Demonstrator of Practical Dentistry to Guy's Hospital, S.E.

FOX, H. C., M.R.C.S., L.S.A., has been appointed Divisional Surgeon of Metropolitan Police for St. Ann's, Stamford-hill.

GAFF, J., L.R.C.P., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

GATES, E. A., L.R.C.P., M.R.C.S., has been re-appointed House Physician to St. Thomas's Hospital.

HAIR, ALLAN, M.R.C.S., L.R.C.P. Lond., has been appointed Assistant Medical Officer to the North-Western Fever Hospital, Hampstead.

HINCHCLIFF, C. F., L.D.S., has been appointed Staff Demonstrator of Practical Dentistry, Guy's Hospital, S.E.

HUGHES, J. BRADLEY, L.R.C.P. Lond., M.R.C.S., has been appointed Senior Resident Medical Officer to the Toxteth Workhouse Infirmary.

JACKSON, MARK, M.D. Irel., M.R.C.S., has been re-appointed Medical Officer of Health by the Barnstaple Town Council.

JONES, A. W., L.R.C.P., M.R.C.S., has been re-appointed a Clinical Assistant in the Special Department for Diseases of the Ear at St. Thomas's Hospital.

KILVERT, J. E., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

LUCAS, S. A., L.R.C.P., M.R.C.S., has been re-appointed an Assistant House Surgeon to St. Thomas's Hospital.

LAW, J., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Sixth Sanitary District of the Township of Oldham, the Oldham Union.

LINDLEY, L. H., M.B., B.Ch. Oxon., has been appointed a Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

MCRAE, G. DOUGLAS, M.B., C.M. Edin., has been appointed Assistant Physician to the Royal Asylum, Morningside, Edinburgh.

PHILLIPS, H. J., L.R.C.P., M.R.C.S., has been re-appointed an Assistant House Surgeon to St. Thomas's Hospital.

POTTER, S. I., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Workhouse and Infirmary by the Dewsbury Board of Guardians.

ROSS, E. H., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

SARGENT, P. W. G., M.A., M.B., B.C. Camb., L.R.C.P., M.R.C.S., has been re-appointed an Assistant House Surgeon to St. Thomas's Hospital.

SCAPING, H. M., B.A. Camb., L.R.C.P., M.R.C.S., has been appointed Junior Obstetric House Physician to St. Thomas's Hospital.

SCOTT, J. B., M.B., C.M. Edin., has been appointed Medical Officer for the Seventh Sanitary District of the Ashton-under-Lyne Union.

SLOCOCK, R., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Spilsby East Sanitary District of the Spilsby Union.

SMITH, R. R., L.R.C.P., L.R.C.S. Irel., has been re-appointed Medical Officer for the Workhouse, Walton, West Derby Union.

STEELE, FRANK, M.R.C.S., L.R.C.P., has been appointed Medical Officer to the Casualty Department, East London Hospital for Children, Shadwell, E.

STEVENS, A. E., M.B. Durh., L.R.C.P., M.R.C.S., has been re-appointed House Physician to St. Thomas's Hospital.

STEVENSON, ROLAND A., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Second Assistant Medical Officer to the Infirmary, Fulham-road, Parish of St. George's, Hanover-square, London.

TAYLOR, F. R. P., M.D. Lond., B.S., L.R.C.P., M.R.C.S., has been re-appointed Medical Superintendent of the Darenth Asylum, Metropolitan Asylum District.

THORP, H. C., M.A., M.B., B.C. Camb., has been appointed House Physician to St. Thomas's Hospital.

UNSWORTH, N., L.R.C.P., M.R.C.S., has been appointed a Clinical Assistant in the Special Department for Diseases of the Skin at St. Thomas's Hospital.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index).

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £50, with board and washing.

BEDFORD COLLEGE, London (for Women), York-place, Baker-street, W.—Lectureship in Bacteriology.

BEDFORD COUNTY HOSPITAL—Senior House Surgeon for one year. Salary £100, with apartments, board, and washing. Also Assistant House Surgeon for six months. Honorarium of £10 given.

BOROUGH OF BURTON-UPON-TRENT.—Medical Officer of Health for the District of the Borough. Salary at the rate of £350 per annum, exclusive of authorised disbursements, payable quarterly.—Applications to the Town Clerk, Burton-upon-Trent.

BRADFORD CHILDREN'S HOSPITAL.—House Surgeon. Salary £30, with board, residence, and washing.

BRADFORD ROYAL INFIRMARY.—Dispensary Surgeon, unmarried. Salary £100 per annum, with board and residence.

BRIGHTON, HOVE, AND PRESTON DISPENSARY, Queen's-road, Brighton.—House Surgeon to the Western Branch. Unmarried. Salary £140 per annum, with furnished apartments, coals, gas, and attendance. (No board allowed or Locum Tenens paid by the Institution.)

COUNTY AND CITY ASYLUM, HEREFORD.—Assistant Medical Officer for 10 or 12 weeks. Salary £2 2s. per week, with board, lodging, &c.—Apply to the Medical Superintendent.

COUNTY ASYLUM, Rainhill, near Liverpool.—Senior Assistant Medical Officer, unmarried. Salary commences at £225 per annum, with prospect of increase to £250, with furnished apartments, board, attendance, and washing.

DUNDEE ROYAL INFIRMARY.—Resident Medical Assistant for six months. Salary at the rate of £40 per annum, with board and washing.

EDAY, Orkney.—Medical Officer, male or female. Salary from the Parish Council £50, from the Medical Association £20. Applications to the Clerk of Parish Council, Eday.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark, S.E.—Junior Resident Medical Officer and Registrar. Salary £50, with board and washing.

FISHERTON ASYLUM.—Assistant Medical Officer. Salary £120 per annum to commence, with board, lodging, and washing.—Apply to Dr. Finch, The Asylum, Salisbury.

GENERAL HOSPITAL, Birmingham.—House Physician, for one year. Salary £70 per annum, with residence, board, and washing.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION, Gloucester.—Physician.

GENERAL INFIRMARY, Leeds.—Honorary Assistant Ophthalmic and Aural Surgeon.

GERMAN HOSPITAL, Dalston.—Honorary Assistant Physician.

GLASGOW CORPORATION.—Bacteriologist in connexion with the Health Department of the City. Salary at the rate of £350 per annum.—Applications to Clerk to the Corporation (Police Department) Glasgow.

GORDON HOSPITAL FOR FISTULA, &c., Vauxhall Bridge-road, London.—Surgeon to out-patients.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Physician to Out-patients.—Also Dental Surgeon.

GUEST HOSPITAL, Dudley.—Assistant House Surgeon for six months. Salary £40 per annum.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Resident House Physicians.

HUDDERSFIELD INFIRMARY.—Assistant House Surgeon. Salary £60 per annum, with board, residence, and washing.

KING'S NORTON UNION.—Resident Deputy Medical Officer at the infirmary and the workhouse at Selly Oak, near Birmingham. Salary £170 the first year, rising £10 yearly to £200 per annum, with furnished residence. Rations or attendance not provided. Appointment subject to statutory deductions. Applications to the Clerk, 10, Newhall-street, Birmingham.

KNIGHTON UNION.—District Medical Officer and Public Vaccinator for the Llanbister. Salary £100 per annum, with certain medical fees. Appointment subject to statutory deductions. Applications to the Clerk, Knighton, Radnorshire.

LIVERPOOL DISPENSARIES, 34, Moorfields, Liverpool.—Assistant Surgeon, unmarried. Salary £100, with board and residence.

LONDON COUNTY ASYLUM, Claybury, Woodford Bridge, Essex.—Junior Assistant Medical Officer, male. Salary £150 per annum, with board, furnished apartments, and washing. Applications to the Clerk of the Asylums Committee, 6, Waterloo-place, S.W.

MANCHESTER HOSPITAL FOR CONSUMPTION AND DISEASES OF THE THROAT AND CHEST.—Assistant Medical Officer. Honorarium £25 per annum.

MASON UNIVERSITY COLLEGE, Birmingham (with Queen's Faculty of Medicine).—Professorship of Physiology.

NEW HOSPITAL FOR WOMEN, 144, Euston-road, London.—Female Senior Assistant to the Out-patient Department for Children, for two years.

NEWPORT AND MONMOUTHSHIRE HOSPITAL.—House Surgeon. Salary £100 per annum, with board and residence (no stimulants provided).

OWENS COLLEGE, Manchester.—Senior Demonstrator in Physiology. Stipend £150 per annum, rising to £200.

ROSS UNION.—Medical Officer for the Walford District. Salary £68 10s. per annum (including all extra medical fees) and subject to statutory deductions. Applications to the Clerk, Ross.

ROYAL BERKS HOSPITAL, Reading.—House Surgeon Salary £60 per annum, with board, lodging, and washing.—Also Assistant House Surgeon. Salary £30 per annum, with board, lodging, and washing. Appointments for one year.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House Physician, unmarried. Salary £65 per annum, with board, residence, &c. Also Honorary Physician-in-Ordinary.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London.—Resident Medical Officer for six months. Salary at the rate of £100 per annum, with furnished apartments, board, and washing.

ROYAL SOUTH HANTS INFIRMARY, Southampton.—Assistant House Surgeon for six months. Salary at the rate of £50 per annum, with board, residence, washing, &c.

ROYAL UNITED HOSPITAL, Bath.—House Surgeon on July 1st, for three months. Salary at the rate of £60 per annum, with board, lodging, and washing.

SEAMEN'S HOSPITAL SOCIETY (*Dreadnought*), Greenwich, S.E.—House Surgeon. Salary £50 per annum, with board, residence, and washing. Also Surgeon to the Dispensary, 51, East India Dock road, E. Salary £65 per annum.

SHAFTESBURY HOUSE PRIVATE ASYLUM, Formby, near Liverpool.—Junior Medical Officer. Salary £50 per annum, with board, lodging, and washing.

STAFFORDSHIRE COUNTY ASYLUM at Stafford.—Medical Officer for two or three months. Salary 3 guineas per week, with furnished apartments, board, &c.

ST. SAVIOUR'S UNION, Surrey.—Second Assistant Medical Officer at the Infirmary, East Dulwich-grove, S.E. Salary £80 per annum, with furnished apartments, board, and washing. Subject to statutory deduction.—Apply to the Clerk, John-street West, Blackfriars-road, London.

TUNBRIDGE WELLS EYE AND EAR HOSPITAL.—Female House Surgeon. Salary £60 per annum, with board and residence.

UNIVERSITY COLLEGE, Bristol.—Professorship of Physiology.

WALSALL AND DISTRICT HOSPITAL.—Resident House Surgeon. Salary £100 per annum, and board, lodging, and washing.

WEST BROMWICH DISTRICT HOSPITAL.—Resident Assistant House Surgeon. Salary £50 per annum, with board, lodging, washing, and attendance.

WEST DERBY UNION.—Resident Assistant Medical Officer at Mill-road Infirmary, Everton, Liverpool, for one year. Salary £100, with rations, subject to statutory deduction.—Apply to the Clerk to the Guardians, Brougham-terrace, Liverpool.

WEST-END HOSPITAL FOR NERVOUS DISEASES, Welbeck-street, London.—Medical Registrar for six months (non-resident). Honorarium, 25 guineas.

WESTMINSTER HOSPITAL, Broad Sanctuary, S.W.—House Surgeon, for six months. Board and lodging in the hospital provided.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Fifth Assistant Medical Officer. Salary £100 per annum, rising £10 a year to £150, with board, &c.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL, Wolverhampton.—Assistant House Surgeon for six months. Honorarium at the rate of £50 per annum given, and board, lodging, and washing provided.

Births, Marriages, and Deaths.

BIRTHS.

FRANCIS.—On June 1st, at Wright-street, Hull, the wife of A. G. Francis, B.A., M.B., B.S., F.R.C.S., of a daughter.

GIBBS.—On June 1st, at Chestnut Lawn, Stechford, Birmingham, the wife of T. Harold Gibbs, M.B., B.S. Dunelm., of a son.

OLIVER.—On May 31st, at Westdene, Maidstone, the wife of Charles Pye Oliver, M.D. Lond., D.P.H., of a son.

MARRIAGES.

BLYTH—ARMSTRONG.—In Benwell Parish Church, on June 1st, by the Rev. Herbert Bott, M.A., vicar of St. Aidan's, assisted by the Rev. A. L. Curry, M.A., Meredith Wynter Blyth, B.A., B.Sc., son of Dr. A. Wynter Blyth, Medical Officer of Health, St. Marylebone, London, to Chrissy Mary, eldest daughter of Henry E. Armstrong, D.Hy., Medical Officer of Health, Newcastle-upon-Tyne.

BUNCOMBE—BOUSFIELD.—On June 1st, at All Saints', Forest-gate, by the Rev. T. F. F. Williams, M.A., Vicar, William Dewey Buncombe, Medical Superintendent of City of London Infirmary, Bow-road, elder son of the late Charles Hope Buncombe, F.R.C.S., of Bow and Putney, to Henrietta Mary, elder daughter of William Jeune Bousfield, of Forest-gate, Essex.

COOKE—JONES.—On June 6th, at the Welsh Calvinistic Methodist Chapel, Garston, by the Rev. W. O. Jones, B.A., Ebenezer Hunt Cooke, M.A., M.B., of Bhusawal, India, son of the Rev. J. Hunt Cooke, of Crouch End, to Katie Williams, only daughter of R. W. Jones, of Garston, Liverpool.

DODD—DE SOLOME.—On June 1st, at Holy Trinity Church, Folkestone, Percy Vernon Dodd, M.A., M.D., of Manor-road, Folkestone, to Marion Maud, younger daughter of the late Anthony de Solome, of Boulogne-sur-Mer.

LETHBRIDGE—BELLETT.—On June 1st, at St. Mary's, Radipole, Weymouth, Sir Alfred Swaine Lethbridge, K.C.S.I., M.D., late Indian Political Service, I.M.S., to Edith Seymour, widow of the late George Bellett, M.A., Bengal Educational Service.

POLLARD—EUAN-SMITH.—On June 1st, at St. Philip's, Kensington, George Wilfred Pollard, M.D., eldest son of George H. Pollard, Esq., of Grassendale, Taunton, to Ella Maclaurin, second daughter of E. Maclaurin Euan-Smith, Esq., of Earl's-court-road, W.

RENDALL—WATSON.—On June 1st, at St. Mary Abbot's, Kensington, Percy Rendall, M.D., of Oxenwood, Cheam, Surrey, to Edith, daughter of Edward Watson, of South Woodford, Essex.

RUCK—PLUMMER.—On June 1st, at the Parish Church, Siddington, Gloucestershire, David Naunton Ruck, M.R.C.S., L.R.C.P., of Ealing, to Elsie Davis, second daughter of William Matthew Plummer, of Siddington.

WILSON—KEMP.—On June 1st, at St. Mary's, Charlecombe, Bath, George Wilson, M.D., of Warwick, to Aileen Ruth, eldest daughter of Edward Chippendall Kemp, J.P., of Dacca, India.

DEATHS.

COGHILL.—On June 5th, at Ventnor, of peritonitis, John George Sinclair Coghill, M.D., F.R.C.P.E., M.R.C.P., Senior Physician of the Royal National Hospital for Consumption, Ventnor, aged 65 years. Scotch and China papers please copy.

HINDLE.—On March 5th, at 41, Railway-road, Darwen, Lancs., Geogre Hindle, M.R.C.S., L.S.A. Lond., aged 49 years.

KERR.—On May 30th, at Wellington-square, Hastings, Norman Kerr, M.D., F.S.S., aged 65 years.

LEY.—On June 1st, at the residence of his brother, Longfield-road, Ealing, W., Edwin Granville Ley, M.D., Deputy Surgeon-General, late A.M.D.

MOIR.—On June 7th, at St. Andrews, N.B., Robert Moir, M.D., F.R.C.S.E., Surgeon-Major (retired), Indian Medical Service.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

THE GEOGRAPHY OF MEDICAL ETHICS.

WE publish below under the heading, "Medical Ethics in Denmark," a letter from a correspondent who has met with conduct at the hands of a Danish fellow practitioner which would be considered by British medical men decidedly unprofessional. He publishes the statement of the way in which he was treated by his *confrère* from Copenhagen hoping that the letter will meet the eye of some leading Danish practitioner who could give an authoritative account of the ethical rules which govern the medical profession in Denmark.

We have no hesitation in admitting our ignorance of the laws that govern the behaviour of professional men towards one another in Denmark, for the subject of medical ethics is one upon which there has been as yet no interchange of national experiences. It is natural to suppose that the English system of medical ethics and etiquette, founded as it is upon that excellent supplementary commandment, "Do unto others as ye would be done by," has its counterpart throughout civilised nations. But though the broad principles of medical etiquette may be the same in all European and other advanced countries the details will often differ, for medical ethics is the term we use for the adaptation of the noble precept we have quoted to the medical man's work-a-day life and the conditions of that life differ with its geographical position. The principles of medical ethics should know no geography, but the application of the principles will have different limitations under different skies. It is possible that in a short time more will be known as to the way in which different nations regard the problems of medical ethics. As a Special Commissioner of THE LANCET has already pointed out (see THE LANCET, May 6th, 1899) a French Ministerial decree has proclaimed that during the Universal Exhibition of 1900 an International Congress will be held in Paris entitled, "Congrès International de Médecine Professionnelle et de Déontologie Médicale." This congress has been organised to discuss all the numerous and complex questions that fall under the heads of medical politics and medical ethics, and if the movement receives proper support the foundation should be laid of a system of medical ethics that would be not English or French or Danish, but universal. We do not expect this result to follow immediately upon the Congress, but we do expect good to come out of an international discussion of "déontologie" (δέον, right, binding; λόγος, science—the science of duty), to use the French term. It is undoubted that nowadays the life of the medical practitioner is not a simple one either in England or elsewhere. The modern medical man's work has immensely increased, his responsibilities have multiplied, his critics have become more numerous, and his remuneration has been much cut down. Great Britain is not the only country where medical aid associations defraud him of his work, nor is it the only country where the rampant claims of the quack are subject to no legal restrictions. It seems to us that a well-conducted congress at which really representative persons from all civilised nations should be present to discuss questions relating to medical ethics would inevitably result in an interchange of valuable experiences. Every nation represented would be put into possession of mutual knowledge regarding the ethical laws guiding the medical profession in other nations which would prevent persons from behaving to each other as "S" alleges the Danish practitioner behaved to him.

But in bringing the International Congress on Medical Ethics for a second time before our readers and in emphasising the value that may under favourable circumstances result from its deliberations we wish to point out that the whole value of such a congress will disappear if the debates are flooded by the loose talk of irresponsible faddists instead of being carried on by duly accredited delegates. We trust that our country will be represented at the Congress as far as possible by the officers of medical societies, medical associations, ethical unions, and defence unions, and that well prepared and properly authenticated reports will be forthcoming, which will give clearly a picture of what may be called the non-scientific side of the medical man's life, its dangers and the value of unions and concerted action in warding off such dangers.

MEDICAL ETHICS IN DENMARK.

To the Editors of THE LANCET.

SIRS,—It would be unjust to form an opinion as to the medical ethics of a country from the procedure of one man but I have recently had a most unpleasant affair with a Danish gentleman who announces himself in the newspapers as "Professor livre du Universidade de Copenhagen," and I would be pleased if this letter should meet the eye of some leading Danish practitioner so that an authorised opinion may be given as to the rules which govern the profession in Denmark. The facts briefly stated are these: S, a Scotch graduate, has been in practice in a Brazilian city for about nine years where, besides general practice, he holds a hospital and several well-remunerated appointments. G, a Danish graduate, practised in this city up to about 10 or 11 years ago. Since then he has been in Copenhagen practising as an ophthalmic surgeon, and on several occasions he has paid visits to this city for business purposes for a few months at a time, occupying at S's invitation the same office and devoting himself almost entirely to his speciality—viz., the eyes. Last year, hearing that G was coming here for business reasons, S proposed that G should take S's practice for six months while S took a holiday at home. S was not obliged to offer his practice to G, as he had on former occasions made quite satisfactory arrangements with two *confrères* to divide his work between them. But thinking the proposed arrangement with G would be a mutual benefit S gave him the preference. G occupied S's house and office had the use of his horses and carriages, paid house and office rent out of proceeds of practice, and kept two-thirds of the net result, S having one-third. This arrangement was only agreed to by G after it had been submitted to the arbitration of a mutual friend, he (G) asking for still better terms. His chief argument was that in leaving the practice to him S was doing much better than by leaving it to his other *confrères* because on S's return G would no longer be his competitor, whereas any other *confrères* would. He also stated that his leave of absence from Copenhagen University was six months but that if S desired to stay away a year G could get the necessary extension. The arrangement made was one by which a good many hundreds of pounds went into G's pocket. In addition G was to be allowed to carry on his speciality in the proceeds of which S was to have no share.

On S's return in November he found that G had already taken another office for himself, announcing in the papers that he was physician, surgeon, and oculist, and "professor livre" of Copenhagen University. Later on S was surprised to hear that G had attended a lady in her confinement who had formerly been attended by S and still more to hear from the lady's husband who thought it rather strange that G had actually taken the engagement during the months that he was acting for S, well knowing that S would have resumed at least two months before the expected confinement.

Again, one of S's appointments was that of medical officer to a bank, paid by fixed salary. During S's absence a member of the staff—a fresh arrival during S's absence—came under G's care for treatment and he was still under treatment when S returned. G, without even saying a word to S, continued to treat this patient for some five months after S's return. In March S received an official communication from the sub-manager of this bank, with whom S had had a disagreement about charges made to him for treatment of his wife, informing him that he (S) was not being consulted by the members of the staff (which was not true except in the above-mentioned case and that of the sub-manager himself) and that it had been decided to dispense with S's services. S then called on G who told him that some time previously, most likely at the time of the above disagreement, of which G was quite cognisant, he had been called on by the sub-manager to know if he (G) would accept the appointment. His reply was that if all was made straight with S he would accept it but that he might be here only a few months more. In a subsequent letter G told S that the sub-manager informed him that it had been spoken of before the supplanting of S, and that if G did not accept the appointment it would be offered to someone else; also that G had considered the other matters S had spoken of and considered that his conduct had been perfectly correct. After this S wrote declining to continue on a footing of apparent friendship with G. I may say that absolutely no question of the relative competency of S and G has arisen and also that all this happened within three months of S's return from Europe. Apologising for the length of this communication.

I am, Sirs, yours faithfully,

May 8th, 1899. S.

REMOVAL OF FOREIGN BODIES FROM THE NOSE.

To the Editors of THE LANCET.

SIRS,—The removal of foreign bodies from the nose is often a matter of some difficulty, more especially when they have been forced or drawn by inspiratory—"snuffling"—efforts up the nostril. A simple manœuvre which I have successfully practised on such occasions is as follows. Whilst the child lies on its mother's lap screaming, place a thin cloth or handkerchief over the mouth and face; place your own mouth to that of the child; then give a sudden, forcible puff. The effect of this is to expel, or at least to send forward, the contents of the nostrils. In this way I have blown a plum stone clean out of the nose, and in other cases a button or other foreign body has been shifted so near to the external nares as to render it easy of removal and thus save a great deal of painful and difficult poking about in the recesses of the nostril. This procedure is not original but is so simple and useful that I have ventured to recall it to the notice of your readers.

I am, Sirs, yours faithfully,

HENRY E. BELCHER.

West Bridgford, Nottingham, June 1st, 1899.

"WHERE SHALL WE BUILD OUR NATIONAL SANATORIA FOR CONSUMPTION?"

To the Editors of THE LANCET.

SIRS,—Under the above heading there have lately appeared in the columns of THE LANCET letters from various correspondents drawing attention to Portishead as a place pre-eminently suited for the successful open-air treatment of pulmonary and allied diseases. As an old resident as well as a medical man I would emphatically endorse the statements of your correspondents in reference to the health-giving properties of this place. May I quote a case in point? An over-

grown and badly-developed lad, 17 years of age, a native of London, was sent down here by one of the leading physicians of the Brompton Hospital on Sept. 28th, 1897, only as an experiment, as the doctor was strongly of opinion that the lad's only chance of recovery was to take the long sea voyage to Australia and stay out there. I found on examination consolidation of the right base of the lung and all the symptoms of commencing phthisis. I thought this a favourable opportunity to try the "open-air" treatment, with extra feeding, limited exercise, and daily drill to expand the lung, &c. Within a fortnight the lad had gained four pounds in weight, night sweats had disappeared, and the lung had greatly recovered its power and breathing space. He steadily improved in every way for six months, then returned home, but had a slight relapse. He again came down and remained till the following September when he left with his lung sound and over a stone heavier in weight.

I am, Sirs, yours faithfully,

CHARLES A. WIGAN, M.D.Durh., M.R.C.S. Eng.

Portishead, Somerset, June 5th, 1899.

A HARD CASE.

To the Editors of THE LANCET.

SIRS,—May I ask the assistance of THE LANCET in the following case? Mr. Henry Raven, F.R.C.S. Eng., who has lived and practised in the same parish over 40 years has suddenly been deprived of almost his sole means of support under the following circumstances. About 13 years ago he sold his practice in consideration of an annuity payable to himself and wife during their joint lives and during the life of the survivor. This annuity was paid regularly until about two years ago, when the purchaser of the practice resold the same to another practitioner on the terms that the vendor should continue to pay the annuity and releasing the practice from the liability to pay the same. The vendor has failed to pay the annuity under circumstances which it is here unnecessary to detail. The annuitants are both in their eighty-third year. He is bed-ridden, paralysed, and stone deaf; she is blind. They have no children either to assist to support them or to look after them. As one of 10 children who in all their infantile maladies received the careful attention of the same kind-hearted old practitioner, I am trying to raise a sum which will enable the aged couple to end their days without distress. Subscriptions will be thankfully received and acknowledged by Messrs. Barclay and Co., Bankers, or by

Your obedient servant,

Swaffham, Norfolk, June 3rd, 1899. A. J. WINTER, Solicitor.

*** Mr. Cadge, F.R.C.S. Eng., of Norwich, writes:—"I have known Mr. Raven for quite 40 years as a worthy and excellent country practitioner. I gladly support Mr. Winter's appeal and will with pleasure contribute £5 towards the fund which he is collecting."—ED. L.

LIST OF SUBSCRIBERS TO THE RAVEN FUND.

	£	s.	d.
J. L.	10	0	0
Mrs. E. Waters	2	0	0
Miss Spurgeon	1	0	0
Mr. W. Preston	0	5	0
Superintendent Short	0	10	0
Mr. George Randall	0	10	0
Mr. S. Shellabear	1	0	0
Mrs. F. Beck	5	0	0
Per Miss A. Beck:—			
Lady Sophia Heaviside	0	10	0
Mr. and Mrs. P. Back	0	10	0
Mr. and Mrs. Aldiss	0	5	0
Mrs. Collier	0	2	0
Miss Ripper	0	1	0
Miss Utting	0	2	6
Miss Wright	0	0	6
Miss E. Smith	0	0	6
Miss A. Beck	0	10	0
Miss Riches	0	0	6
Mrs. Lindsey	0	10	0
Rev. W. R. Eaton	1	0	0
Captain H. Waters	3	0	0
Mrs. Orton	5	0	0
Mr. Charles Orton	1	1	0
Per Mr. W. M. Farrer:—			
Miss Farrer	1	0	0
Mr. Micklefield	1	1	0
Miss Flower	1	0	0
Executors of the late Dr. Rudge	10	10	0
Canon Smith	0	5	0
Mrs. Milne	1	1	0
Dr. Emerson	1	0	0
Rev. C. H. Winter	1	0	0
Mrs. Bird	1	0	0
Mr. W. Cadge	5	0	0
Per Mr. F. W. Beck:—			
General Buliver	0	5	0

"ALWAYS HAVE A GOOD COAT ON YOUR BACK."

THESE words were the late Sir Andrew Clark's and came at the end of some very shrewd counsels addressed to a young medical friend just entering on practice. Not that Sir Andrew Clark was original in advising a strict attention to wearing apparel on the practitioner's part. The advice may in germ be found in Celsus, in the famous passage in which he dwells on the advantage of making a cheerful impression on the patient. He attaches much importance to the "hilaris vultus" (good-humoured countenance) of the medical man and by implication puts his veto on any outward appurtenance (dress included) which the patient might find distasteful or repellent. The opposite extreme—dandyism—he would have found objectionable for the same reason. "So-and-so was so well dressed that everybody looked at him," was once said to Beau Brummel. "Then he was not well dressed," was Brummel's rejoinder. The truth is that excess either way, slovenliness on the one hand or a "petit-maitre" fastidiousness on the other, argues a defect of judgment not reassuring to the patient, often full of morbid fancies or misgivings and seldom in a mood to be charitable. The mediæval school of Salerno is even more explicit on medical demeanour and apparel than the "Roman Hippocrates." In addition to the "kindly look" it counsels the "good coat" and does not object to the "handsome ring on the finger" as evidence of means or of some patient's gratitude.

"Clemens accedat medicus cum veste polita;
Luceat in digitis splendida gemma suis."

(Let the physician approach, bland of demeanour and in dress *à la mode*: let a brilliant of pure water sparkle on his fingers.) Nor, according to the same authority, ought his means of locomotion to be out of keeping with his dress:—

"Si fieri valeat, quadrupes sibi sit pretiosus,
Ejus et ornatus splendidus atque decens."

(If possible let him have a horse of value and let its equipment be bright and in good taste.) Besides impressing his *clientèle* favourably it will be his endeavour to win its goodwill:—

"Ornatu nitido conabere carior esse."

(With a handsome turn-out you will try to be better liked—if, indeed, "carior" does not admit of another rendering in the sense of "gaining higher fees.") This latter interpretation seems implied in the second line of the distich:—

"Splendidus ornatus plurima dona dabit."

(A magnificent turn-out will yield the largest *honoraria*.) The sad effects of a disregard of "externals" are given in another distich:—

"Viliter indutus munus sibi vile parabit;
Nam pauper medicus vilia dona capit."

(Shabbily dressed the practitioner will earn for himself a shabby fee, for if poor his receipts are correspondingly so.) These "wise saws" of the Salernitan school point to the fact that its *alumni* were more than the monastic practitioners who attended the sick or disabled as part of their religious duties. They included the fashionable or the court physician practising in high places. It was, indeed, for a Norman king that, in the first instance, Salerno compiled its metrical rules.

"THE FUND FOR THE RELIEF OF THE WIDOW OF THE LATE MR. H. KINGSLEY HUNTER, L.S.A."

To the Editors of THE LANCET.

SIRS,—I beg to announce the receipt of the undermentioned donations to this fund, making a total of £72 7s. 3d.

I am, Sirs, yours faithfully,

RIVERS WILLSON, Treasurer.

42, Wellington-square, Oxford, June 6th, 1899.

	£	s.	d.
Dr. J. B. Ball	1	1	0
Dr. E. J. Nix	2	2	0
Mr. E. Creighton	1	1	0
A. A.	0	10	6
Mr. Percy Sharp	0	10	6
Mr. Henry Stear	1	1	0
Dr. Francis T. Bond	0	5	0
Mr. Leonard A. Bidwell	1	1	0
Dr. R. Petch	1	1	0
Mr. Walter H. Dodd	1	1	0

Dakta Sahib.—We do not see that there will be any benefit to the profession at large gained by the publication of the correspondence in question. It is unfortunate that Dr. R. resented our correspondent's action through a misapprehension. It is also unfortunate that our correspondent was not informed of the facts contained in Dr. R.'s second letter. The matter seems to us to be one which both gentlemen should at once agree to forget.

W. K.—Our supplements at different times have touched upon the growth of hospitals but there is no one supplement which gives the whole story nor do we know any book that contains it. The big London and provincial hospitals have all at one time or another, we believe, issued pamphlets containing their histories. For the ancient history of London hospitals our correspondent may consult Strype's Stow's Survey of London and other recognised antiquarian authorities.

P. D. S.—No such book has been written. The introductory and valedictory addresses of the presidents of various learned societies, ophthalmological, obstetrical, &c., often take the form of a review of progress along certain lines. The Annus Medicus of THE LANCET gives a *résumé* of medical and surgical developments during each past year.

E. H. P.—The waters of Levico (Tyrol) are both arsenical and ferruginous and of good repute. There are no arsenical waters known to us in England. The medical man who recommended the treatment perhaps knows of a water the properties of which accord with his suggestion.

M.R.C.P.—The address of the Tallerman Institute is 59, Welbeck-street. The question concerning fees had better be addressed to the secretary.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 8th, 1899.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
June 2	30·07	S.	...	126	86	61	62	72	Fine
,, 3	30·19	S.E.	...	100	82	54	54	61	Fine
,, 4	30·23	S.W.	...	111	81	55	60	68	Fine
,, 5	30·24	S.W.	...	123	87	60	60	70	Fine
,, 6	30·25	S.E.	...	107	83	63	63	70	Hazy
,, 7	30·29	S.E.	...	110	78	60	60	67	Hazy
,, 8	30·41	E.	...	110	60	52	50	54	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (12th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (13th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (14th).—St. Bartholomew's (1.30 P.M.), University College, (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.).

THURSDAY (15th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (16th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (17th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (12th).—ROENTGEN SOCIETY (11, Chandos-street, Cavendish-square, W.).—7.30 P.M. Council Meeting. 8 P.M. Major Beevor, Mr. J. H. Edwards, and Mr. H. W. Cox: Demonstration of Portable Roentgen Apparatus for Field and Ward Work.—Mr. F. W. W. Baker (for Mr. Gregory): Demonstration of a new Stereoscope.—Dr. Walsh will also show a new Stereoscope.

TUESDAY (13th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Papers:—Dr. L. Rogers: The Results of Segregation of Cases and Moving from Infected Sites in Eradicating the Assam Epidemic Malarial Fever, or Kala-azar.—Dr. J. H. Sequeira: The Remote Prognosis of Pericarditis.

WEDNESDAY (14th).—NORTH-WEST LONDON CLINICAL SOCIETY (North-West London Hospital).—8.30 P.M. Clinical Meeting.

FRIDAY (16th).—WEST LONDON MEDICO-CHIRURGICAL SOCIETY (Town Hall, Hammersmith, W.).—8.30 P.M. Professor W. Osler: Cerebro-Spinal Fever. (Cavendish Lecture.)

SATURDAY (17th).—NEUROLOGICAL SOCIETY OF LONDON (Physiological Laboratory, Cambridge).—4.15 P.M. Paper: Dr. W. H. R. Rivers: Some Physiological Observations on the Natives of Torres Straits. 6.30 P.M. Dinner in Trinity Hall.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (12th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Mr. W. Wingrave: The Pathology of Middle Ear Disease.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. C. B. Keetley: Injuries and Deformities of the Upper Extremity and Hand.

TUESDAY (13th).—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3.30 P.M. Mr. Horsley: Surgery of the Nervous System.

WEDNESDAY (14th).—HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. S. Martin: Mediastinal Tumours.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—4.30 P.M. Dr. Eddowes: Drug and Plant Eruptions. (Post-graduate Course.)

THURSDAY (15th).—CENTRAL LONDON THROAT, NOSE, AND EAR HOSPITAL (Gray's Inn-road, W.C.).—5 P.M. Dr. D. Grant: Diagnosis and Treatment of Discharges from the Ear.

CHARING-CROSS HOSPITAL.—4 P.M. Dr. M. Davidson: Roentgen Ray Demonstration. (Post-Graduate Class.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Lees: Demonstration of Selected Cases.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. C. B. Keetley: Injuries and Deformities of the Upper Extremity and Hand.

LONDON TEMPERANCE HOSPITAL.—2 P.M. Dr. S. Fenwick: Clinical and Pathological Demonstration to Senior Students.

During the week marked copies of the following newspapers have been received: *Hereford Times, Manchester Guardian, Leicester Daily Post, East Anglian Daily Times, Sussex Daily News, Sheffield Daily Telegraph, Lincolnshire Echo, Western Morning News, Dundee Advertiser, Nottingham Express, Times of India, Pioneer Mail, Brighton Gazette, Scotsman, Citizen, Yorkshire Post, Builder, Architect, Bristol Mercury, Sanitary Record, Truth, City Press, Liverpool Daily Post, Eastern Daily Press, Leeds Mercury, Radnorshire Standard, Temperance Record, Mining Journal, Hertfordshire Mercury, Reading Mercury, Surrey Advertiser, Local Government Chronicle, Public Health, Local Government Journal, Daily Messenger (Paris), Kalgoorlie Miner, South Wales Daily Star, Macclesfield Courier, Warrington Guardian, Faversham Mercury, Widnes News, Sporting Life, Dewsbury Reporter, Craven Herald, Barnsley Independent, Oundle Guardian, East Essex and Halstead Times, Gloucester Journal, Malton Gazette, Public Health Engineer, Islington Gazette, Brigend Chronicle, Cornish Times, Peterhead Sentinel, &c., &c.*

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It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

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